A.I.A. File 16-E-1

LUPTON

Steel Casements

Constructor Specialties Co.
2234 Olive Street
St. Louis :: Missouri
Telephone GArfield 3233

RESIDENCE CASEMENTS

LUPTON
mfm
STEEL
WINDOWS

MICHAEL FLYNN
MANUFACTURING CO.
PHILADELPHIA

A.I.A. File 16-E-1

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THE Michael Flynn Manufacturing Company, successors to David Lupton's Sons Company, in continuing this long-established line of Lupton Casements, are guided by the conviction that a product of fine quality will find ready acceptance by those whom it is designed to benefit. Lupton Casements are built to high standard specifications for enduring service and beauty. They embody new developments in design, operation and window accessories and offer a wide range of types to suit the varied requirements of modern building construction.

Lupton CASEMENTS

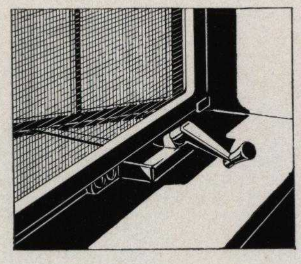
Residence Casements
and Casement Doors

STEEL CASEMENTS BY
MICHAEL FLYNN
MANUFACTURING COMPANY

ALLEGHENY AVE. AT TULIP ST.
PHILADELPHIA, PA.

LUPTON
mfm
WINDOW PRODUCTS

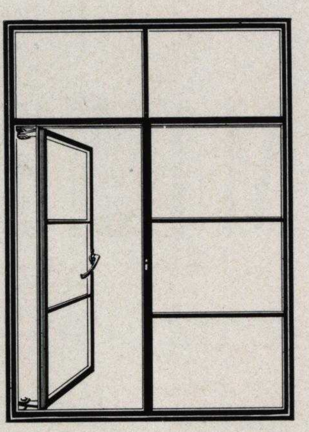
Lupton RESIDENCE CASEMENTS



Operator for underscreen operated casements.

Lupton Residence Casements are made of solid hot-rolled steel sections specifically designed for casement windows. The consequent reduction in the number of separate pieces creates a corresponding increase in the solidity of the finished windows. One-piece transom bars, muntin members, meeting stiles, and frame sections with mitered and electrically welded joints, combine to make this modern casement rigid and durable. Weather will not warp Lupton Casements or make them stick.

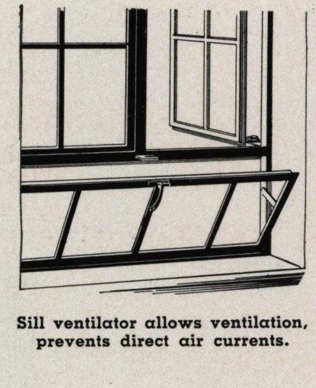
All Lupton Residence Casements are built to the same high standard specification. Several types differing only in method of operation and screen application permit selections to meet individual requirements.



Economy screened or non-screened casement shown with vertical muntins omitted.

UNDERSCREEN OPERATED CASEMENTS, page 14:—Screened casements with underscreen operation combine maximum comfort and convenience. A window may be opened or closed from within the room without disturbing screens or curtains by lightly turning the handle illustrated at left, above. Bronze wire screens with unobtrusive metal frames fit snugly against the windows. Screens are held in place by clips so that they may be removed quickly when windows are to be cleaned.

ECONOMY SCREENED CASEMENTS, page 15:—These are the most economical screened casements. They present the same high standard construction and appearance as the underscreen operated casements without the cost of the underscreen operators. Casements are opened or closed by handles on the ventilators. Friction hinges hold casements at any open position. A special feature is the solid bronze locking handle that permits a positive latch at a very small degree of opening if required in cold or inclement weather. Screens of bronze wire in metal frames are attached by hinges to casement frames. Fixed transoms are recommended with this method of screening.



Sill ventilator allows ventilation, prevents direct air currents.

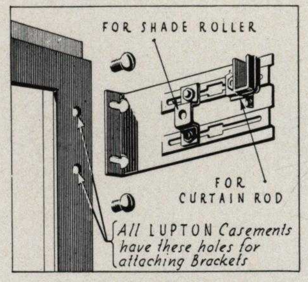
NON-SCREENED CASEMENTS:—Non-screened casements are identical in construction with the Economy screened type, but screens are not included. If screens are desired later, hinged screens are easily attached.

CASEMENTS WITHOUT MUNTINS, page 10:—Any of the above types of casements may be obtained without muntins or with some of the muntins omitted.

The standard units, with vertical muntins omitted, shown on page 10, are furnished in Economy screened type and non-screened type only and are used where saving in cost is an important factor.

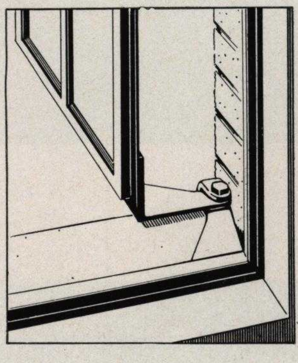
SILL VENTILATORS, page 10:—These units, designed to fit under standard Residence Casement units, give controlled ventilation without direct draft. Ventilators open in at top as shown in sketch at bottom of facing page. Metal screens may be attached outside.

SHADES, CURTAINS, VENETIAN BLINDS:—Brackets for shades are not furnished by the casement manufacturer unless specified, but all Lupton Residence Casements have holes for attaching standard brackets. The type of bracket here illustrated may be built up to accommodate any combination of shades and curtains.


FOR SHADE ROLLER
FOR CURTAIN ROD
All LUPTON Casements have these holes for attaching Brackets

Shade brackets are easily attached.

WINDOW CLEANING:—Cleaning both sides of glass in all Lupton Casements is easily and safely done from inside the building, as all types of casements have hinges that provide a space of about 4 inches between jamb and fully opened casement.

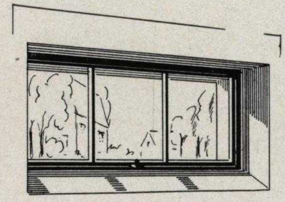


Window-cleaning hinge permits cleaning both sides of glass from within the room.

WOOD SURROUNDS, page 13:—Wood surrounds simplify installation in frame and brick veneer construction. These frames are of California Redwood cut to exact sizes to completely frame any of the standard casement units or pairs of units. Details on page 13 show how they provide a guide for exterior and interior finishes.

METAL CASINGS, page 16:—Metal casings form a neat, durable interior finish and eliminate interior trim and plaster return around windows. Page 16 shows details of installation.

BAY WINDOWS AND CORNER WINDOWS, page 17:—Lupton Residence Casements are easily installed in bay or corner windows. Standard mullions can be furnished to suit any angle bay. Details and dimensions for corner windows and several types of bays are given on page 17.



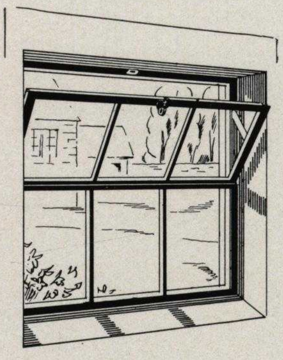
Basement window.

WINTER WINDOWS, page 20:—Lupton Winter Windows are metal framed glass panels designed to cover the entire window area. They are attached on the inside of windows and form a dead air space that effectively reduces heat loss and prevents condensation. In air-conditioned rooms they are practically a necessity. Details are given on page 20.

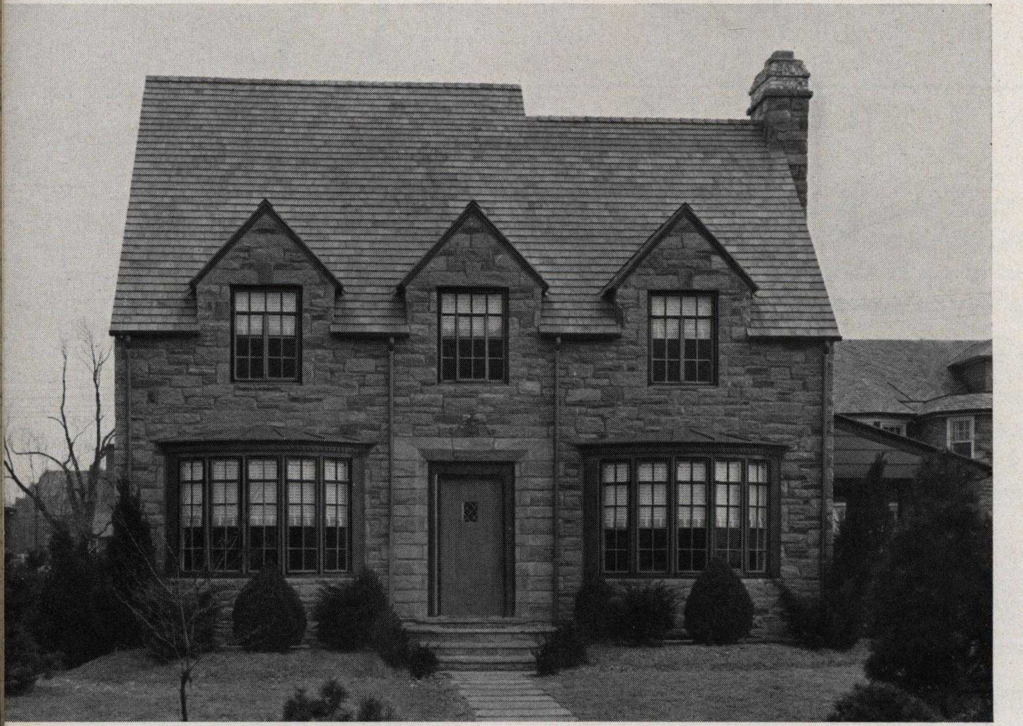
CASEMENT DOORS, page 22:—Standard double casement doors that may be used with Residence Casements are detailed on page 23. Side lights and transoms in standard sizes afford flexibility in design.

Casement doors are also available in special designs to meet individual requirements.

BASEMENT AND UTILITY WINDOWS, page 21:—Basement and Utility Windows complete the Lupton Residence Window line by providing units suitable for basements, garages, barns, etc.

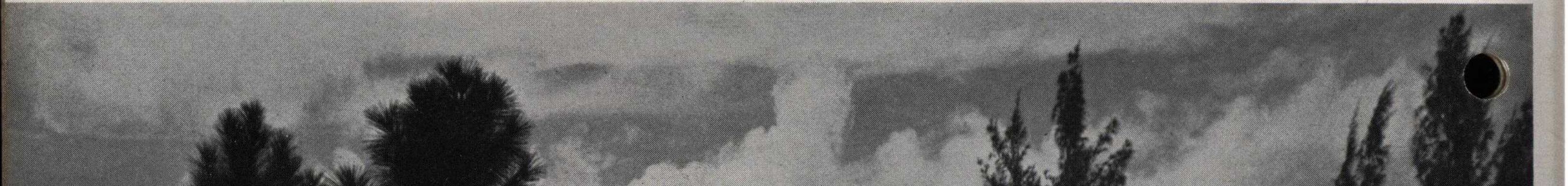


Utility window.



Curved bay windows—residence in Overbrook Manor, Pa.

Casements without vertical muntins accent the horizontal lines of this residence in Cocoanut Grove, Florida.



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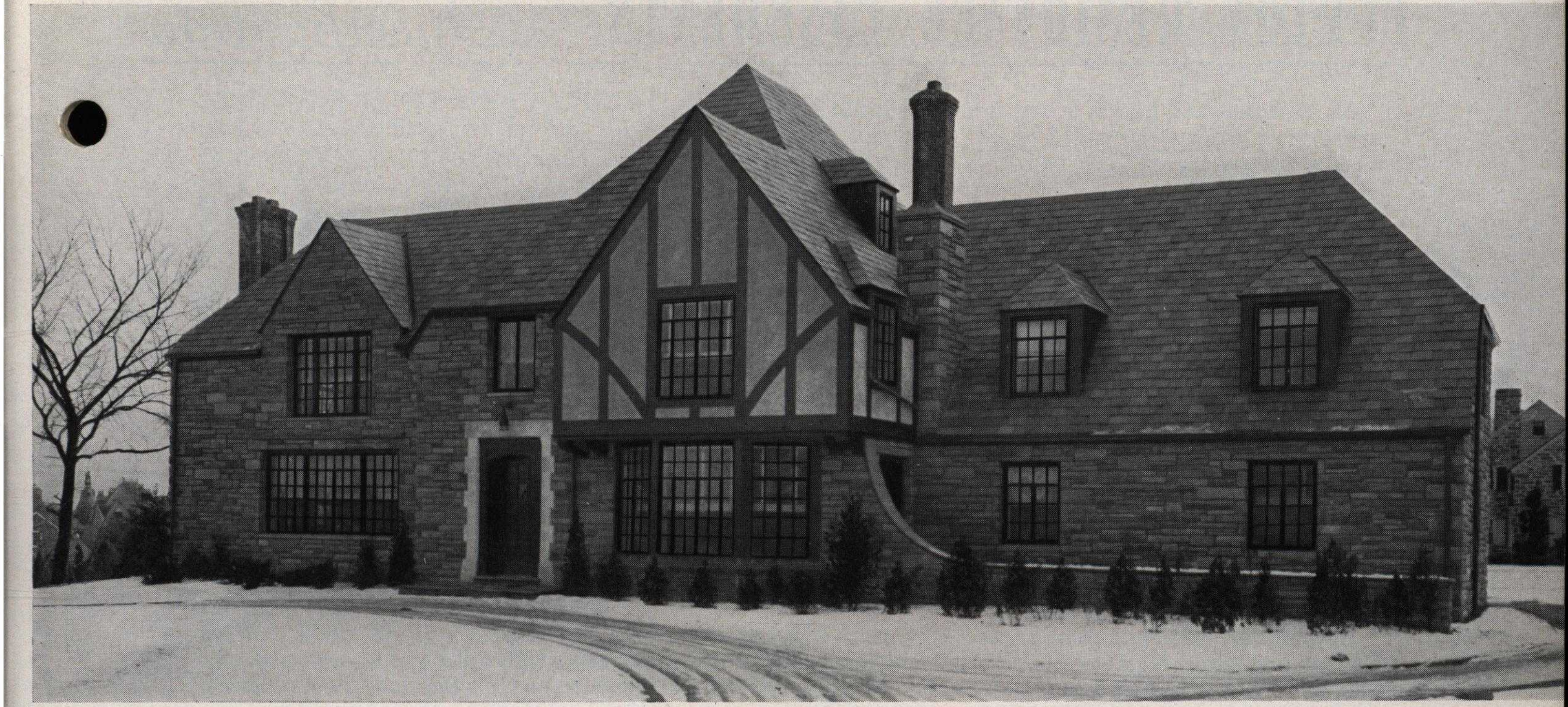
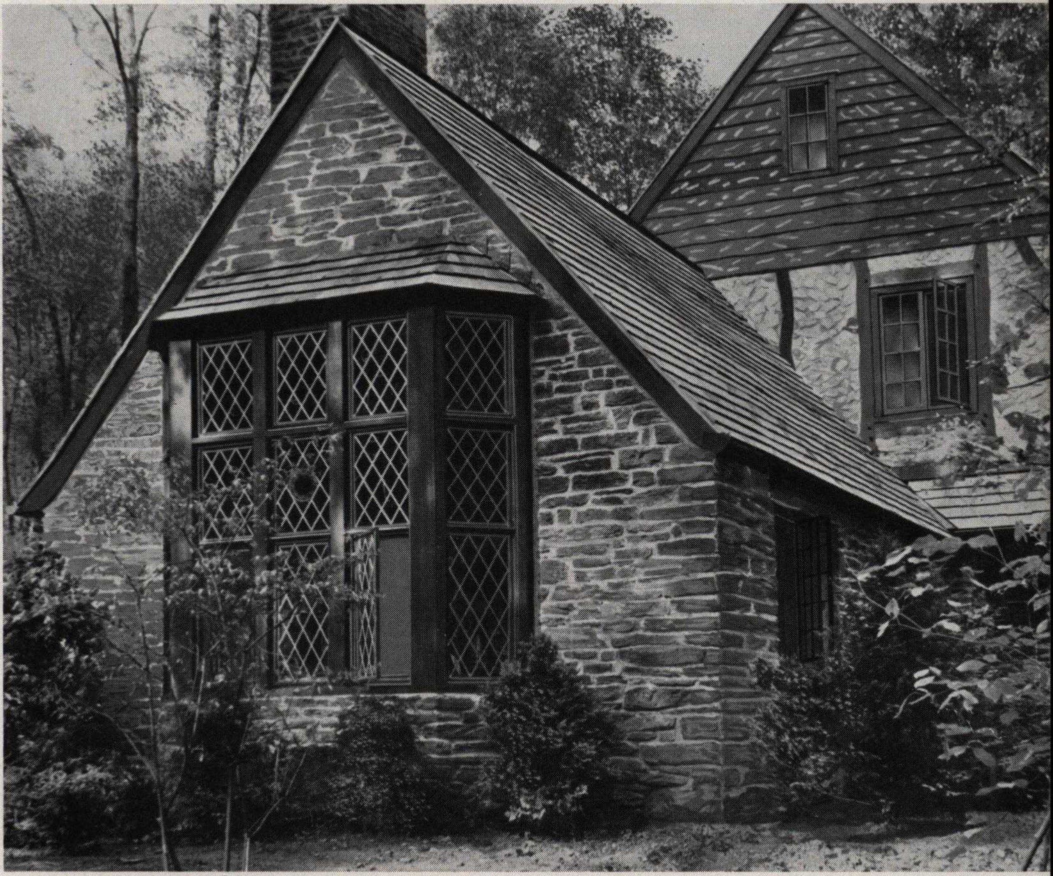


Large composite windows—
residence in Rosemont, Pa.



Muntins have been omitted to
permit use of leaded glass in
this residence in Radnor, Pa.

All sections shall be hot rolled from new billet steel.

WEIGHT OF SECTIONS:—Combined weight of frame and ventilator shall be not less than 2.18 pounds per lineal foot exclusive of fins or sub-frames.

SIZE OF SECTIONS:—All frame and ventilating sections shall be unequal leg sections specifically designed for the manufacture of casement windows. Each section shall have a depth front to back of not less than one inch and a minimum thickness of ⅛ inch.

GLAZING PROVISION:—Sections shall be designed for outside putty glazing. Wire clips shall be furnished for glazing.

VENTILATORS:—Ventilators shall be side hinged or top hinged to swing out as indicated on elevations.

JOINTS:—Frame and ventilator joints shall be mitered and butt-welded along their entire intersection and ground flush.

MUNTINS:—Muntins shall be interlocked with flush joints at their intersections and tenoned and riveted at frame connections.

CONTACT:—Ventilators shall make continuous double overlapping contact with frames on all sides.

ANCHORS:—Anchor clips shall be furnished as indicated on casement manufacturer's details. Continuous anchors* of 16-gauge steel shall be furnished at head and jambs of all casements set direct to masonry. (*Continuous anchors are furnished at extra cost when specified.)

DRIPS:—Drips of 16-gauge steel shall be attached in factory over all ventilators extending to head of window.

MULLIONS and TRANSOM BARS:—Where two or more window units are used in one opening, mullions or transom bars of hot-rolled steel shapes shall be furnished.

FOR UNDERSCREEN OPERATED CASEMENTS—Specify:—All casements shall be prepared with tapped holes for attaching Lupton fixed screens and shall be designed for operation of ventilators from within the building without moving screens.

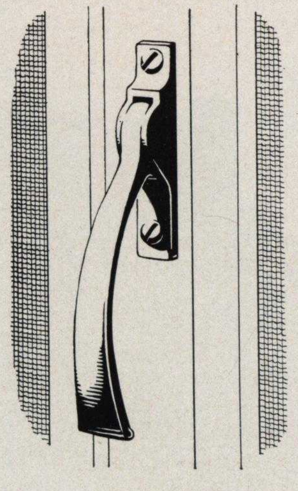
Casements shall be equipped with bronze lift-action locking handles, underscreen operators of worm and gear type and window-cleaning type hinges. Top hinged transoms shall have stay bars and close-up friction hinges.

Hinges shall be steel with all friction contacts bronze to steel and shall be solidly welded to frames.

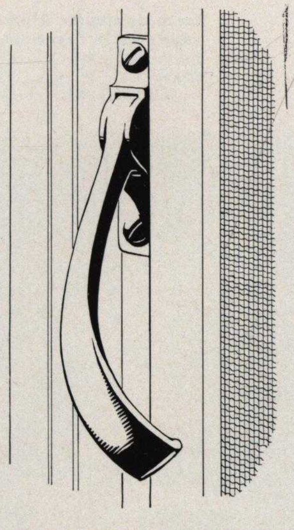
FOR ECONOMY SCREENED OR NON-SCREENED CASEMENTS—Specify:—All casements shall be equipped with cam-action locking handles and strike plates of solid bronze and window-cleaning type friction hinges. Top hinged transoms shall have transom latches and close-up friction hinges.

Hinges shall be steel with all friction contacts bronze to steel and shall be solidly welded to frames.

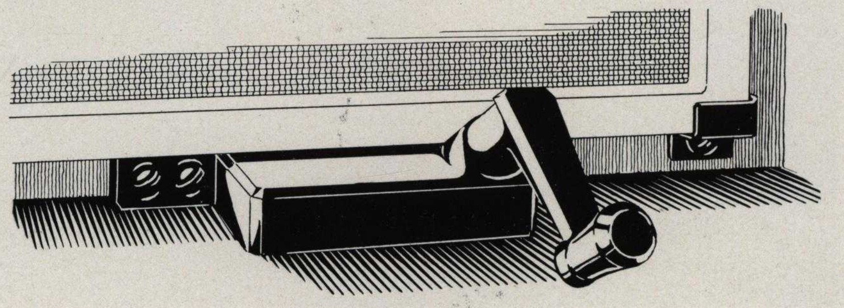
Economy Screened Casements shall be prepared for attaching Lupton hinged screens.



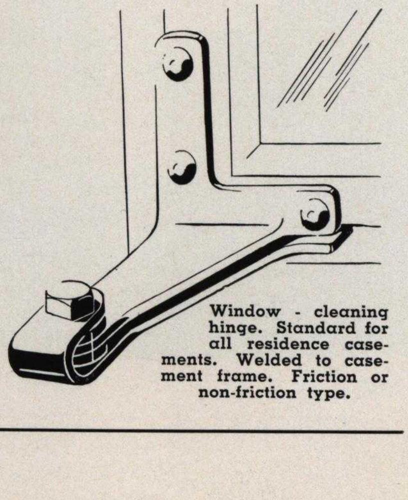
Locking handle No. F-100 for underscreen operated double casements.



Locking handle No. F-101 (right hand shown) for underscreen operated single casements.



Underscreen operator No. F-107 (Right hand shown.)



Window - cleaning hinge. Standard for all residence casements. Welded to casement frame. Friction or non-friction type.

ALTERNATE HARDWARE FINISHES—Note:—Solid bronze hardware with any desired finish will be furnished when specified, at added cost.

SCREENS:—Furnish Lupton fixed screens for all Underscreen Operated Casements (or Lupton hinged screens for all Economy Screened Casements) and clips (or hinges) for attaching. Screen frames shall be tubular steel with corners of frames reinforced and shall have removable splines for rewiring. Frames shall be galvanized and painted one coat of gray enamel. Screen cloth shall be 16-mesh bronze wire.

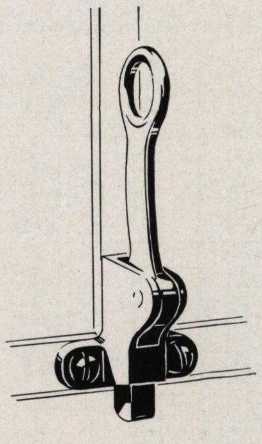
Alternate—When specified, all aluminum screens or screens of other metals will be furnished, at added cost.

FOR WINTER WINDOWS—Specify:—Furnish Lupton Winter Windows for all fixed and ventilated casement windows. Frames shall be tubular steel welded at corners and welds ground flush. They shall be galvanized and painted one coat of gray enamel. Windows shall be delivered glazed with double-thick glass (or 3/16" plate glass, at extra cost) held by removable spring bronze splines. An insulating seal of resilient rubber shall be provided between Winter Windows and casement frames. If ventilators are required, specify:—Bottom hinged, open-in sill ventilators shall be built into Winter Window frames. Contact between ventilators and frames shall be sealed with resilient rubber.

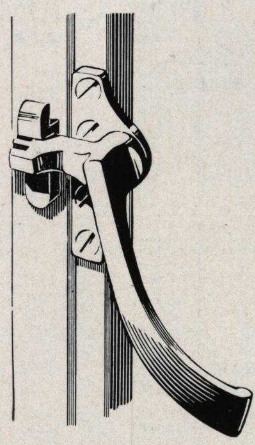
SHADE BRACKETS:—All casement frames shall have open holes for attaching shade brackets. (Note:—Holes are 1 1/4" o.c. to accommodate window manufacturer's standard brackets which will be furnished when specified, at added cost.)

PAINT:—Casements shall receive one priming coat of protective paint at the factory.

INSTALLATION:—Casements shall be installed by casement manufacturer. (Where this is not possible, the manufacturer's directions must be carefully followed.) Gray non-staining mastic cement shall be furnished and applied before installation as shown on casement manufacturer's standard details.



Transom latch No. 354 for Economy screened or non-screened casements.



Locking handle No. F-108 (right hand shown), mounted on ventilator of Economy screened or non-screened casements. Casement can be latched partly open.

Handle No. F-109 for sill ventilators is similar, but without the two-point latch.

NOTES:—Work included under other contracts.

PAINTING:—One coat after installation and *before* glazing is recommended. Additional coats should be applied no less than three weeks *after* glazing in order that putty may harden.

Important:—Windows should be cleaned thoroughly before painting. Track on under side of screened casement ventilator should not be painted.

GLAZING:—Glazing should be done by experienced steel window glaziers, using special steel window putty. If putty cannot be obtained locally, it may be obtained through our representatives or dealers. Glass should be bedded in putty to prevent glass to metal contact. 1/8" plate glass is recommended.

CALKING:—Where gun-calking or pointing after installation is required, it should be included under another contract.

INSTALLATION:—When installation is not to be done by the window manufacturer, the following points should be covered in the installation specification.

Provide that contractor receiving windows shall stack them vertically with edges resting on timbers in a protected location.

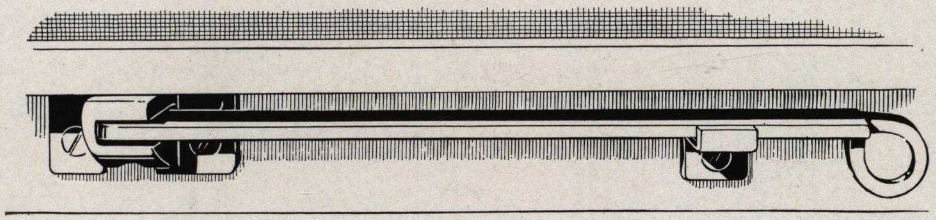
Openings must be square and jambs plumb.

After windows are set and wedged in place, and before being permanently anchored, ventilators should be tested for proper closing (top of ventilator in Underscreen Operated Casement should close slightly in advance of bottom).

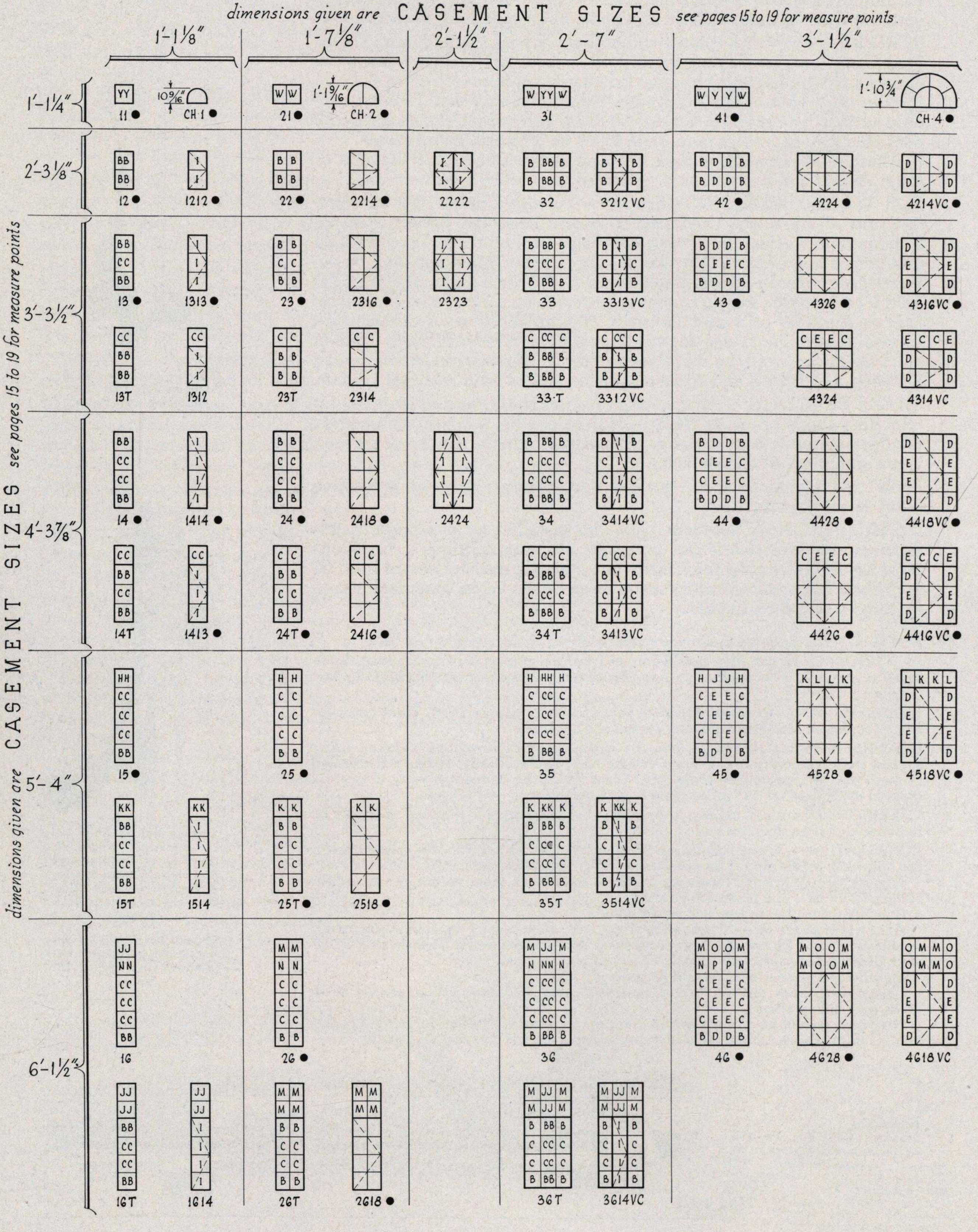
Muntins in adjacent units should be perfectly aligned.

Lintels should not rest on tops of casements and adequate flashing should be in place over all openings.

Hardware should be applied before glazing and ventilators tested for perfect operation, as adjustments cannot be made after glazing without endangering glass.

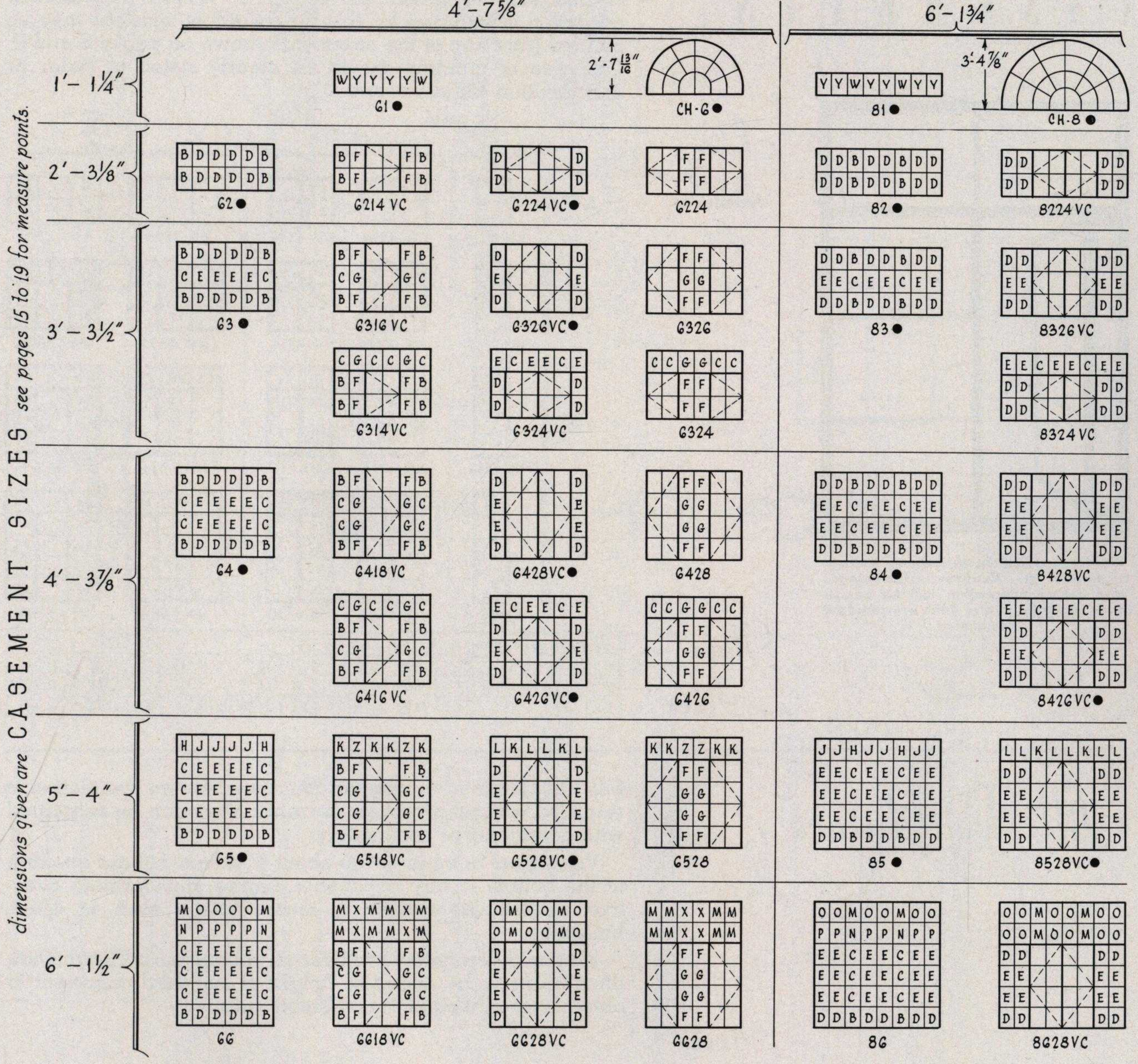


At right: Transom stay bar No. 169 for underscreen operation of transoms.

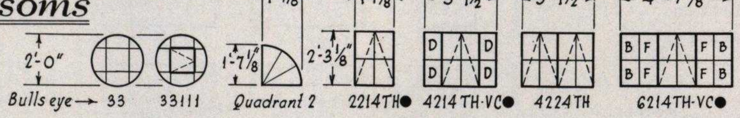

dimensions given are CASEMENT SIZES see pages 15 to 19 for measure points
1'-1⅛"
1'-7⅛"
2'-1½"
2'-7"
3'-1½"
1'-1¼"
11 ●
10 9/16"
CH-1 ●
21 ●
1'-1 9/16"
CH-2 ●
31
41 ●
1'-10¾"
CH-4 ●
2'-3⅛"
12 ●
1212 ●
22 ●
2214 ●
2222
32
3212 VC
42 ●
4224 ●
4214VC ●
3'-3½"
13 ●
1313 ●
23 ●
2316 ●
2323
33
3313VC
43 ●
4326 ●
4316VC ●
13T
1312
23T
2314
33-T
3312VC
4324
4314VC
4'-3⅞"
14 ●
1414 ●
24 ●
2418 ●
2424
34
3414VC
44 ●
4428 ●
4418VC ●
14T
1413 ●
24T ●
2416 ●
34T
3413VC
4426 ●
4416VC ●
5'-4"
15 ●
25 ●
35
45 ●
4528 ●
4518VC ●
15T
1514
25T ●
2518 ●
35T
3514VC
6'-1½"
16
26 ●
36
46 ●
4628 ●
4618VC
16T
1614
26T
2618 ●
36T
3614VC

LUPTON RESIDENCE CASEMENTS *Sizes and Designs*

dimensions given are CASEMENT SIZES *see pages 15 to 19 for measure points*



Transoms



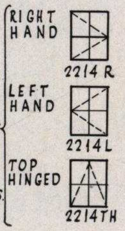
Notes

● Denotes STOCK TYPES

Dimensions given are "over all" measurements. See pages 15 to 19.

MULLIONS :- Where more than one unit is used in an opening allow ⅛" between units for Mullion or Transom Bar.

Casements are shown as viewed from OUTSIDE. Right hand casements have hinges on the right, left hand casements on the left. Dash lines show swing of ventilator thus:



Single casements are made right or left hand as desired. Letter "R" after code number indicates right hand, letter "L", left hand.

MUNTINS OMITTED :- Any or all muntins may be omitted from standard units.

SILL VENTILATORS :- See pages 10 and 11

Glass Sizes

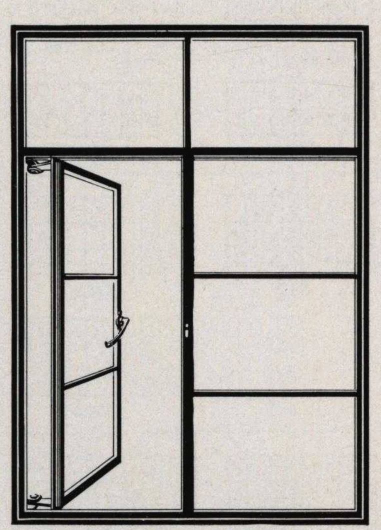
Lights not marked are 8" x 12"

B	8½" x 12 9/16"	M	8½" x 10½"	Y	8 13/16" x 11½"
C	8½" x 12"	N	8½" x 10 15/16"	Z	9" x 11 13/16"
D	8 13/16" x 12 9/16"	O	8 13/16" x 10½"	BB	11⅜" x 12 9/16"
E	8 13/16" x 12"	P	8 13/16" x 11"	CC	11⅜" x 12"
F	9" x 12 9/16"	R	8" x 10 3/16"	HH	11⅜" x 12¼"
G	9" x 12"	S	8 13/16" x 10 3/16"	JJ	11⅜" x 10½"
H	8½" x 12¼"	T	8" x 9⅞"	KK	11⅜" x 11 13/16"
I	10¼" x 12"	U	8 13/16" x 9⅞"	LL	8 3/16" x 9 3/16"
J	8 13/16" x 12¼"	V	8" x 9 3/16"	NN	11⅜" x 11"
K	8½" x 11 13/16"	W	8½" x 11½"	YY	11⅜" x 11½"
L	8 13/16" x 11 13/16"	X	9" x 10½"		

LUPTON RESIDENCE CASEMENTS

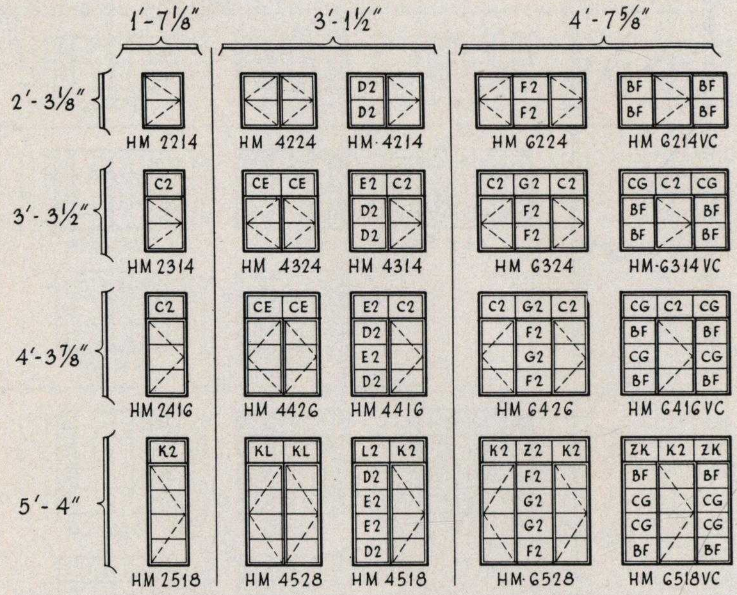
Horizontal Muntin Types

The casements here illustrated have been simplified for economy and are furnished without screens or with the hinged screens shown on page 15. Where underscreen operation is required for this type window, muntins may be omitted from any of the casements shown on pages 8 and 9. Omission of muntins should be clearly stated in order or specification for casements.



Residence casement of Economy horizontal muntin type. Window-cleaning hinges and bronze cam-action locking handle with two-point winter latch are standard equipment.

Sizes → over-all dimensions



Glass → Sizes

Glass in ventilators is A 2 — 16¼" x 12"						CE	17¾" x 12"
C 2	17⅜" x 12"	F 2	18⅜" x 12½"	L·2	18" x 11¾"	CG	17⅞" x 12
D 2	18" x 12½"	G 2	18⅜" x 12"	Z 2	18⅜" x 11¾"	KL	17¾" x 11¾"
E 2	18" x 12"	K 2	17⅜" x 11¾"	BF	17⅞" x 12½"	ZK	17⅞" x 11¾"

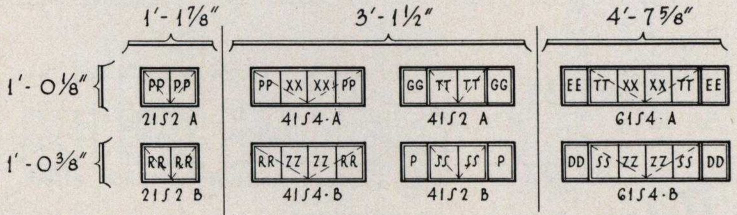
Sill Ventilators

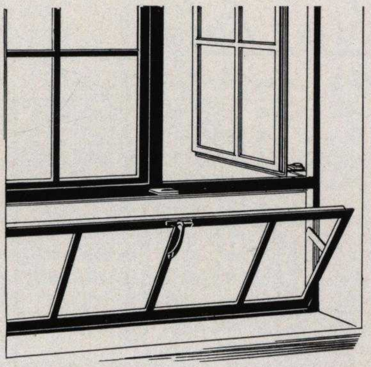
Sill Ventilators are designed for use wherever ventilation is required without direct air currents. They can be combined with casements or used singly.

Ventilators open in at top about 4 inches without opening at the bottom to any noticeable degree, thus forming effective windshields similar to those usually seen in office buildings.

Widths given below are over-all dimensions. Heights are dimensions to be added to height of standard casement to obtain over-all height of combined units.

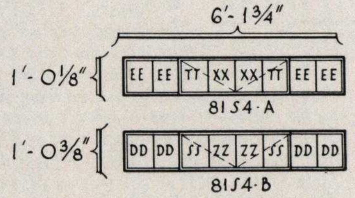
Sizes → Heights are not over-all dimensions See next page



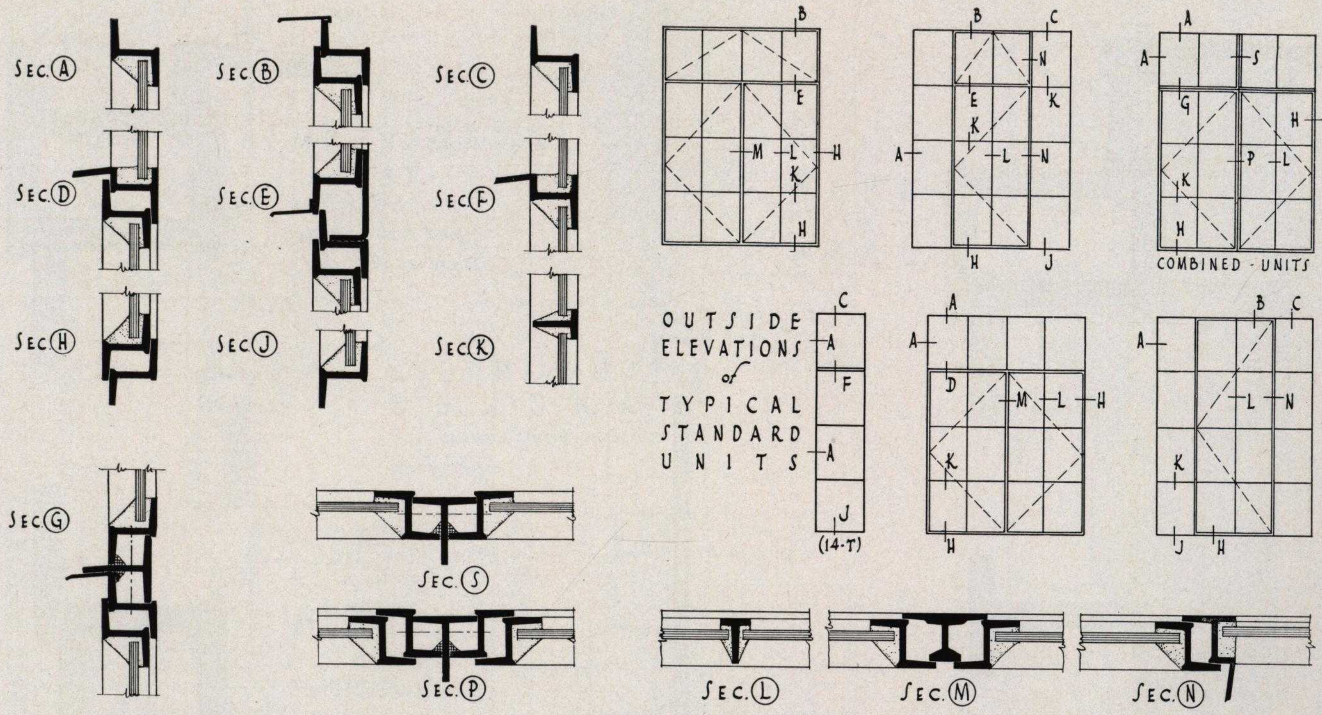


Glass → Sizes

P	8¹³⁄₁₆" x 11"	RR	7½" x 9¹¹⁄₁₆"
DD	8¾" x 11"	SS	7⅞" x 9¹¹⁄₁₆"
EE	8¾" x 10¾"	TT	7⅞" x 9⁷⁄₁₆"
GG	8⅞" x 10¾"	XX	8⅞" x 9⁷⁄₁₆"
PP	7½" x 9⁷⁄₁₆"	ZZ	8⅞" x 9¹¹⁄₁₆"



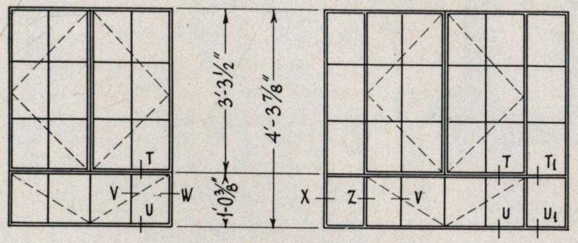
Casement Details



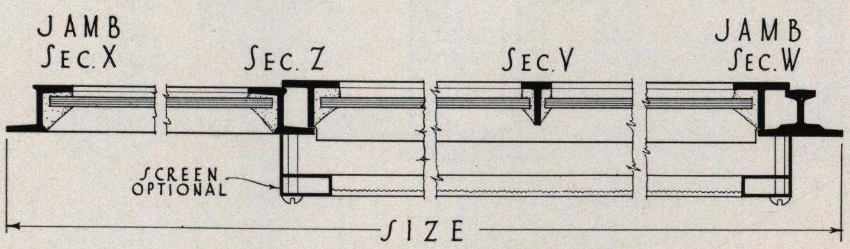
OUTSIDE ELEVATIONS of TYPICAL STANDARD UNITS

DETAILS of CASEMENTS ~ SCALE 3" = 1'-0"

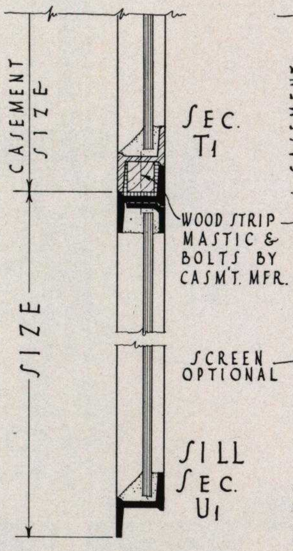
Sill Ventilator Details

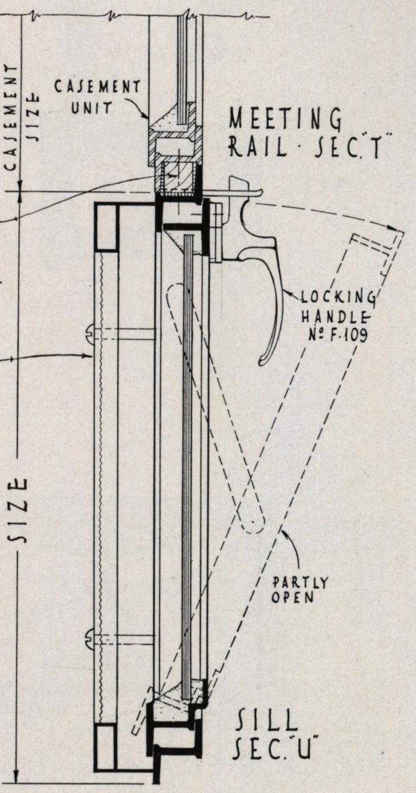


OUTSIDE ELEVATIONS of TYPICAL COMBINED UNITS
(IN-AT-TOP VENTILATOR MAY BE USED UNDER ANY STANDARD ~ RESIDENCE CASEMENT UNIT.)



HORIZONTAL SECTIONS

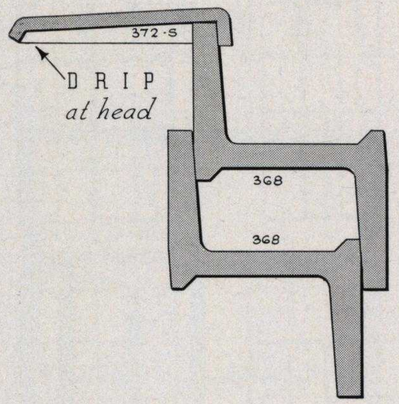




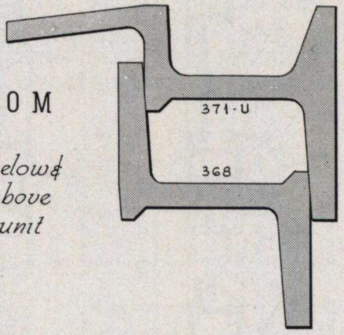
VERTICAL SECTIONS

SCALE for DETAILS 3" = 1'-0"

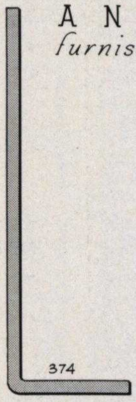
LUPTON RESIDENCE CASEMENTS *Full Size Sections*



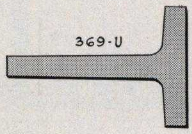
HEAD
or
JAMB



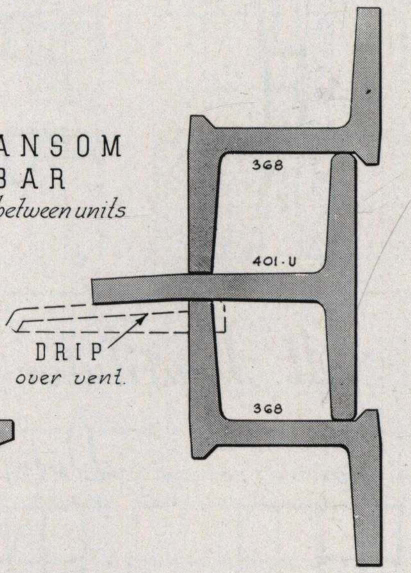
TRANSOM
BAR
casement below & fixed light above made in one unit



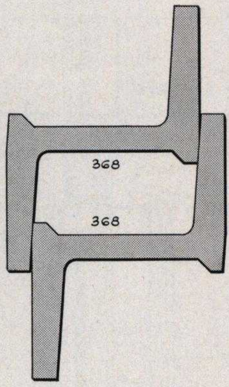
CONTINUOUS
ANCHOR
furnished when specified



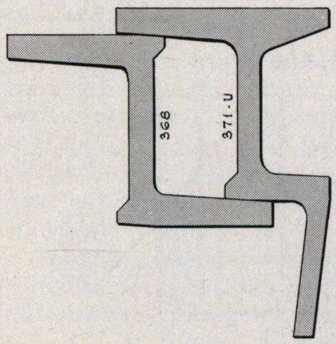
MUNTIN
horizontal or vertical



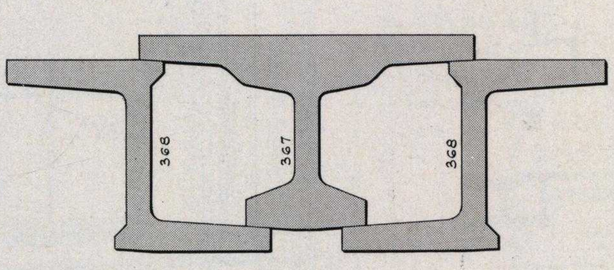
TRANSOM
BAR
used between units



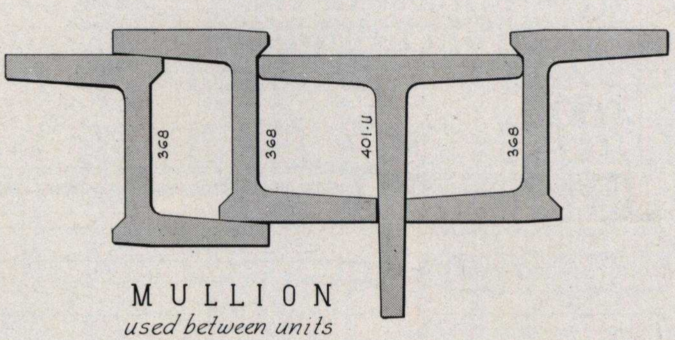
SILL



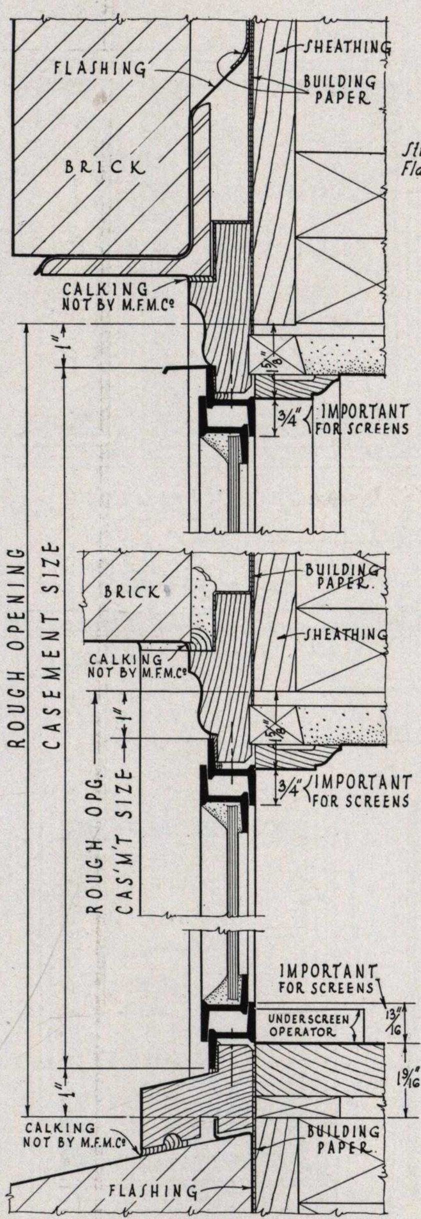
MEETING
STILE
between casement and fixed light - in one unit



MEETING STILE
for double casements

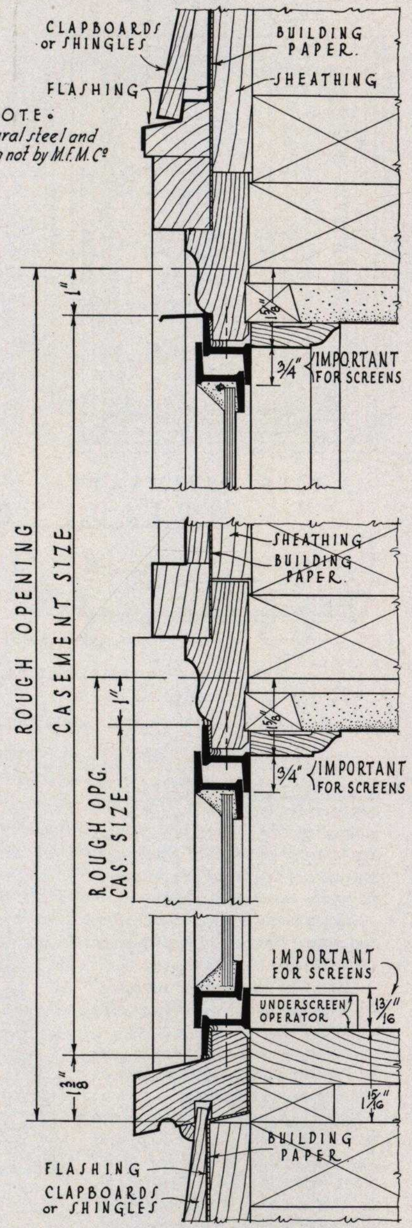


MULLION
used between units



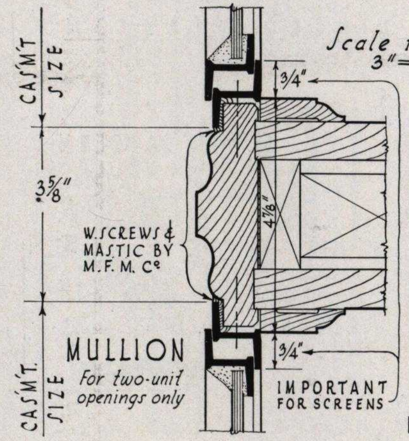
BRICK VENEER WALL

• NOTE •
Structural steel and Flashing not by M.F.M.Cº



CLAPBOARDS or SHINGLES

Scale for Details 3" = 1'-0"



MULLION
For two-unit openings only

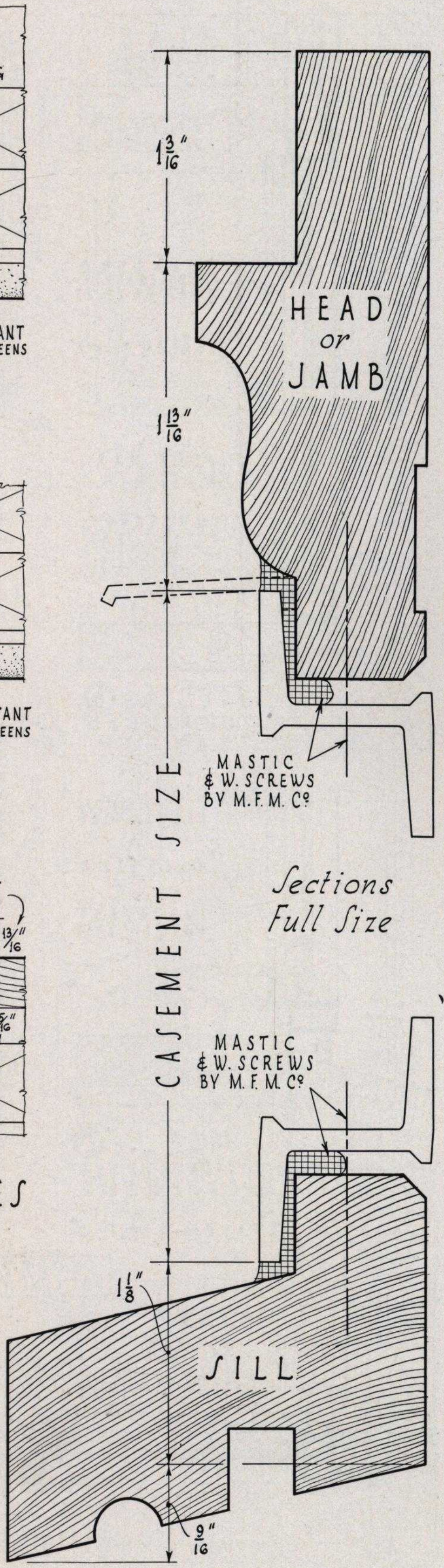
NOTE

Lupton Wood Surrounds used with Lupton Casements provide a time and trouble saving short cut to better window installation.

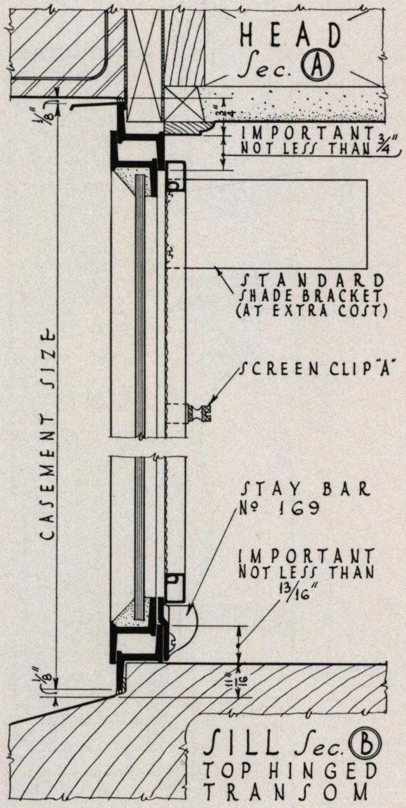
Surrounds are California Redwood cut to exact size with interlocking joints mitered at upper corners. Screws, nails and mastic are furnished for assembling. Assembly in field is recommended to avoid damage in transit.

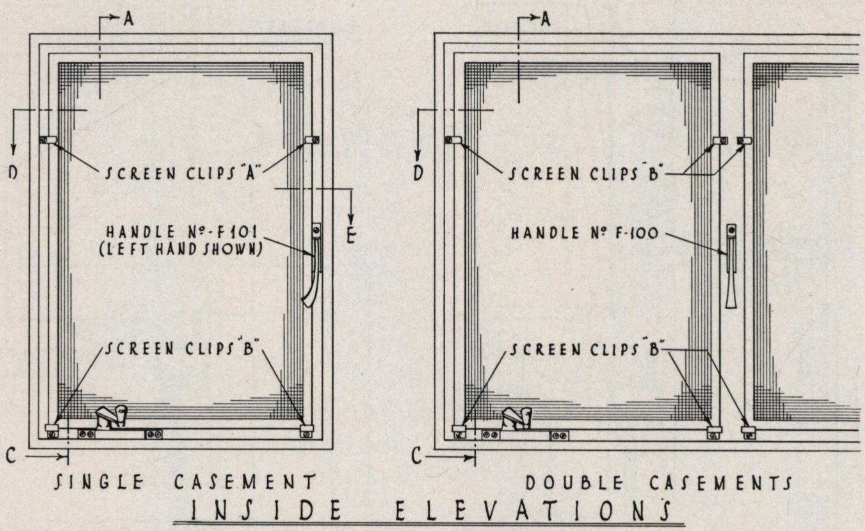
Frames are unpainted.

For SCREEN DETAILS see pages 14 & 15

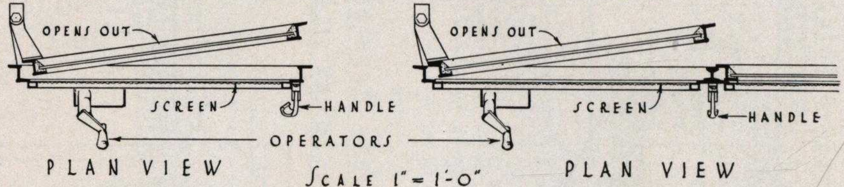

13/16"
HEAD or JAMB
113/16"
MASTIC & W. SCREWS BY M.F.M.Cº
CASEMENT SIZE
MASTIC & W. SCREWS BY M.F.M.Cº
11/8"
SILL
9/16"

Sections Full Size


HEAD
Sec. Ⓐ
1/8"
IMPORTANT NOT LESS THAN 3/4"
STANDARD SHADE BRACKET (AT EXTRA COST)
SCREEN CLIP "A"
CASEMENT SIZE
STAY BAR Nº 169
IMPORTANT NOT LESS THAN 13/16"
1/8"
13/16
SILL Sec. Ⓑ
TOP HINGED TRANSOM

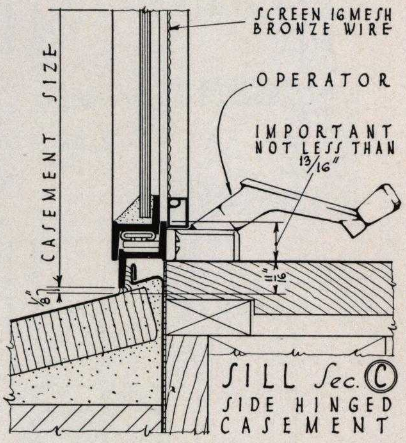


INSIDE ELEVATIONS



PLAN VIEW PLAN VIEW

Scale 1" = 1'-0"



Scale for Details 3" = 1'-0"

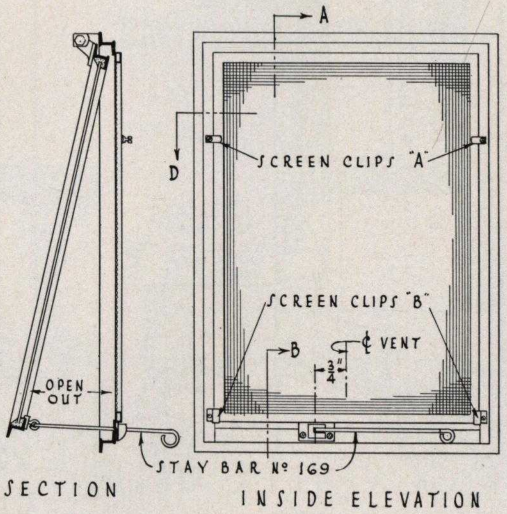
__Screened Residence Casements__ are operated, locked and unlocked without moving the screens. Screens are held tightly against casement frames with clips but can be removed easily when necessary.

Hinges are of window cleaning type and permit cleaning outside of glass from inside the room.

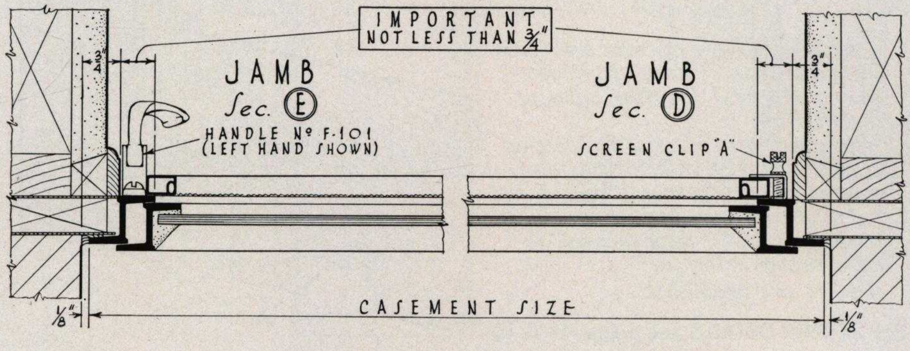
Operating hardware is indicated on this page and illustrated on pages 6 and 7.

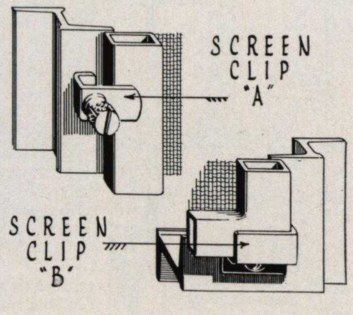
Screens have 16 mesh bronze wire in galvanized tubular steel frames Frames are rewireable.

__IMPORTANT__: It is very important that plaster and trim be so placed that the inside face of the casement frame is clear for a space of 3/4" at Head and Jambs and 13/16" at Sill as shown on this page. – If this margin is not maintained screens and hardware cannot be applied properly.

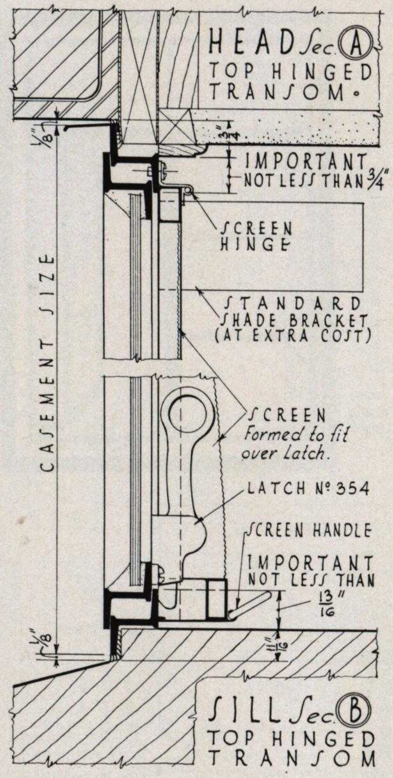


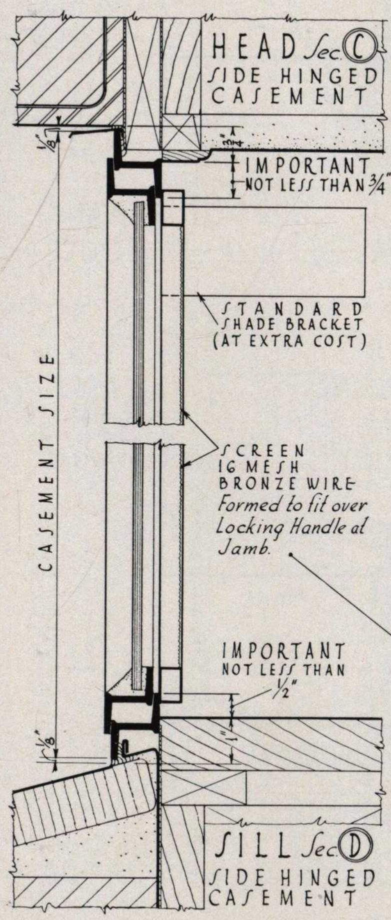
TOP HINGED TRANSOM

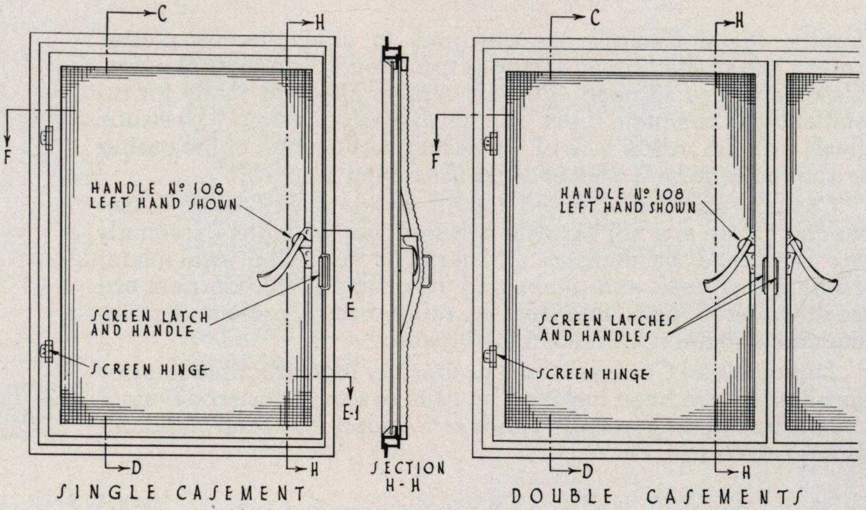




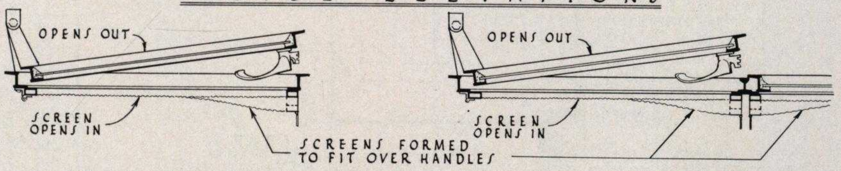
LUPTON RESIDENCE CASEMENTS *Hinged Screens*


HEAD Sec. A
TOP HINGED TRANSOM.
1/8"
IMPORTANT NOT LESS THAN 3/4"
SCREEN HINGE
STANDARD SHADE BRACKET (AT EXTRA COST)
CASEMENT SIZE
SCREEN Formed to fit over Latch.
LATCH Nº 354
SCREEN HANDLE
IMPORTANT NOT LESS THAN 13/16"
1/8"
SILL Sec. B
TOP HINGED TRANSOM


HEAD Sec. C
SIDE HINGED CASEMENT
1/8"
IMPORTANT NOT LESS THAN 3/4"
STANDARD SHADE BRACKET (AT EXTRA COST)
CASEMENT SIZE
SCREEN 16 MESH BRONZE WIRE Formed to fit over Locking Handle at Jamb.
IMPORTANT NOT LESS THAN 1/2"
1/8"
SILL Sec. D
SIDE HINGED CASEMENT



INSIDE ELEVATIONS



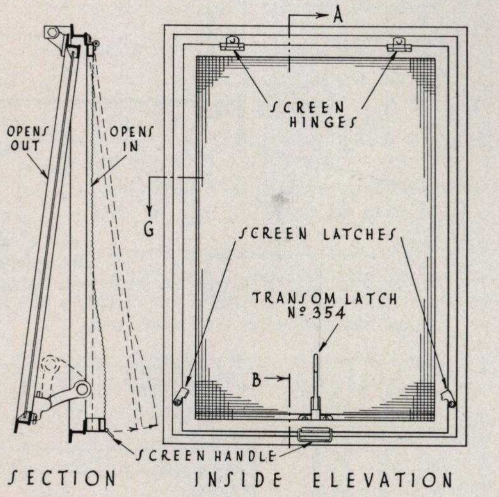
PLAN VIEW . Scale 1" = 1'-0" PLAN VIEW

ECONOMY SCREENED CASEMENTS are furnished with hinged screens illustrated on this page The screens are flat against the casements except where they are formed to fit over the locking handles and latches. Locking handles and latches are indicated on this page and illustrated on page 7.

Ventilators are held open by friction hinges Hinges are window cleaning type permitting outside of glass to be cleaned from inside the room.

Screens have 16 mesh bronze wire in galvanized tubular steel frames. Frames are rewireable. Hinges and latches hold screens tightly against casement frames

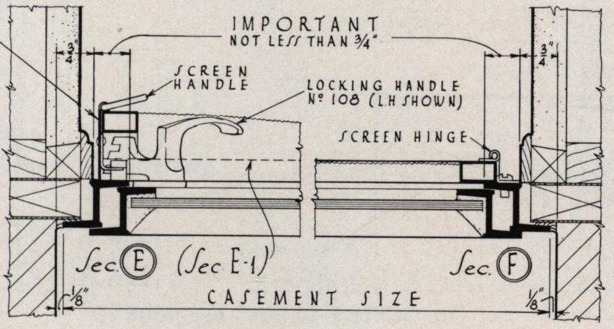
IMPORTANT - It is important that the plaster and trim be so placed that the inside face of casement frame is clear for a space of 3/4" at Head and Jambs and 1/2" at Sill (13/16" at sill of top-hinged unit) See details on this page. If this margin is not maintained screens cannot be applied properly.



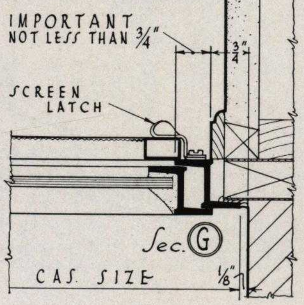
TOP HINGED TRANSOM
Scale 1" = 1'-0"

SCALE FOR DETAILS 3" = 1'-0"

SIDE HINGED CASEMENTS



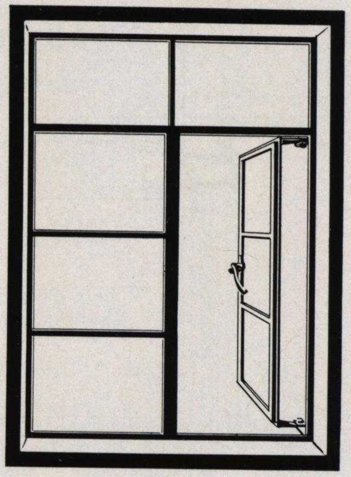
TOP HINGED TRANSOM



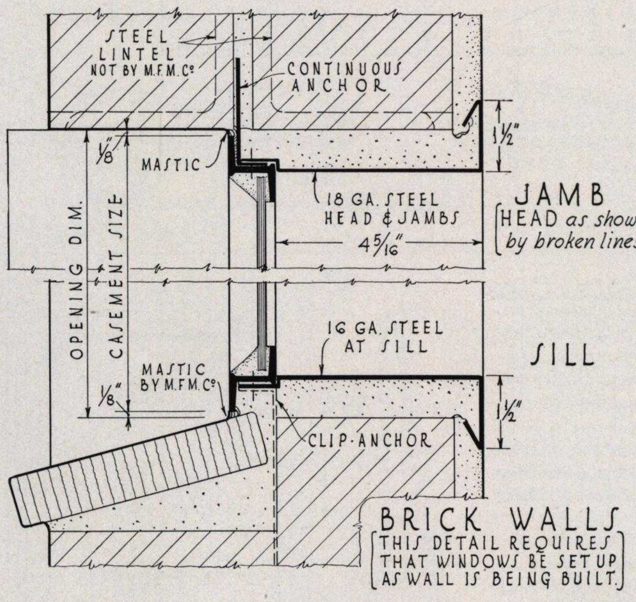
Lupton Metal Casings are designed to eliminate the plaster return and costly fitting of interior trim around window openings. Casements are shipped with the casings attached ready for installation as complete units. The finish plaster coat may be struck flush with the inside face of the casing, as the edge of the casing is shaped to form a plaster lock. (See details below.)

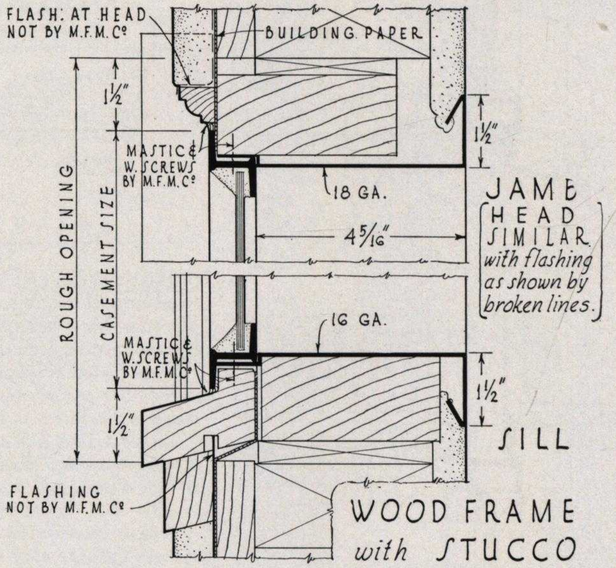
Casings may be obtained for all standard Residence Casements. (They are not furnished where two or more casements are combined by mullions.) Material is hot-rolled steel plate, 18-gauge at head and jambs and 16-gauge at sill. Corners are neatly mitered, fitted and strongly reinforced. A protective priming coat of paint is applied at the factory.

Lupton Metal Casings form a practically indestructible interior finish and have been installed by us in several housing developments, including Westfield Acres at Camden, N. J., and Highland Homes at Wayne, Pa.

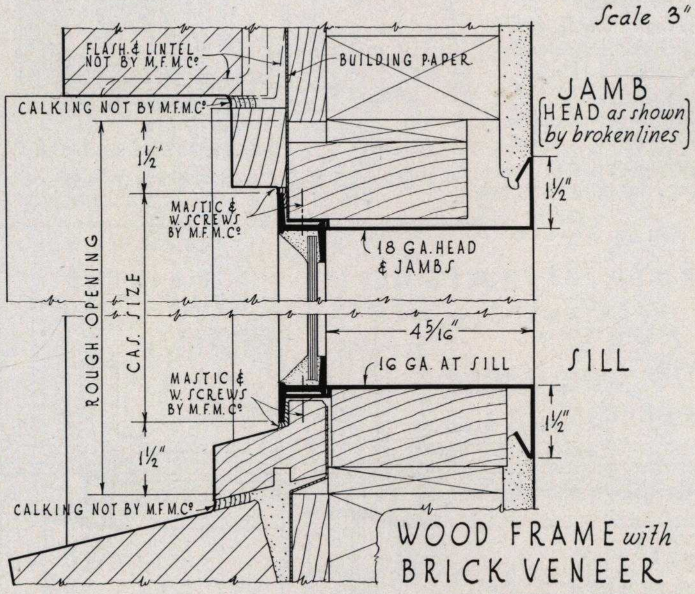


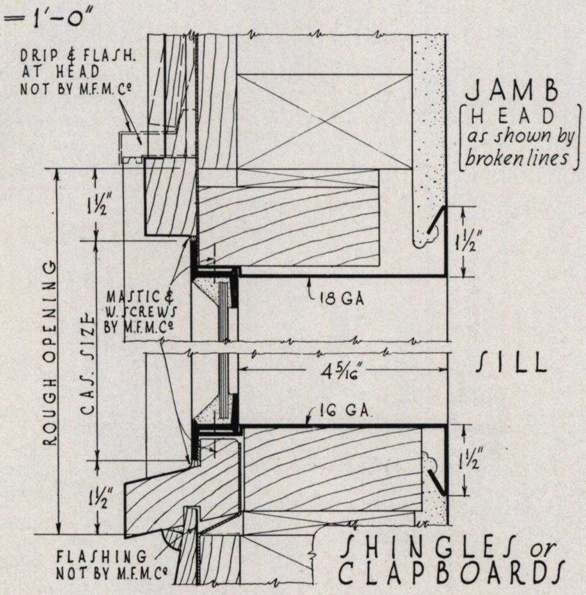
Lupton metal casing shown with Economy - type casement.


STEEL LINTEL NOT BY M.F.M. Cº
CONTINUOUS ANCHOR
MASTIC
1/8"
OPENING DIM.
CASEMENT SIZE
18 GA. STEEL HEAD & JAMBS
4 5/16"
1 1/2"
JAMB
[HEAD as shown by broken lines.]
16 GA. STEEL AT SILL
SILL
MASTIC BY M.F.M. Cº
1/8"
1 1/2"
CLIP-ANCHOR
BRICK WALLS
[THIS DETAIL REQUIRES THAT WINDOWS BE SET UP AS WALL IS BEING BUILT.]


FLASH. AT HEAD NOT BY M.F.M. Cº
BUILDING PAPER
1 1/2"
1 1/2"
ROUGH OPENING
CASEMENT SIZE
MASTIC & W. SCREWS BY M.F.M. Cº
18 GA.
4 5/16"
JAMB
[HEAD SIMILAR with flashing as shown by broken lines.]
16 GA.
MASTIC & W. SCREWS BY M.F.M. Cº
1 1/2"
1 1/2"
SILL
FLASHING NOT BY M.F.M. Cº
WOOD FRAME with STUCCO

Scale 3" = 1'-0"




DRIP & FLASH. AT HEAD NOT BY M.F.M. Cº
JAMB
[HEAD as shown by broken lines]
1 1/2"
1 1/2"
ROUGH OPENING
CAS. SIZE
MASTIC & W. SCREWS BY M.F.M. Cº
18 GA
4 5/16"
SILL
16 GA.
1 1/2"
1 1/2"
FLASHING NOT BY M.F.M. Cº
SHINGLES or CLAPBOARDS

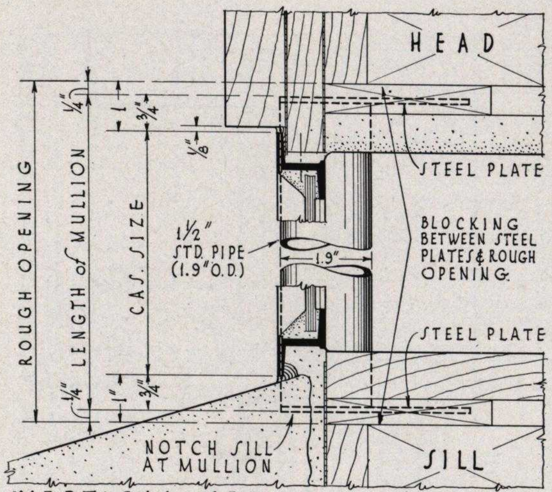
For SCREEN DETAILS see page 15

Corner Mullion Details

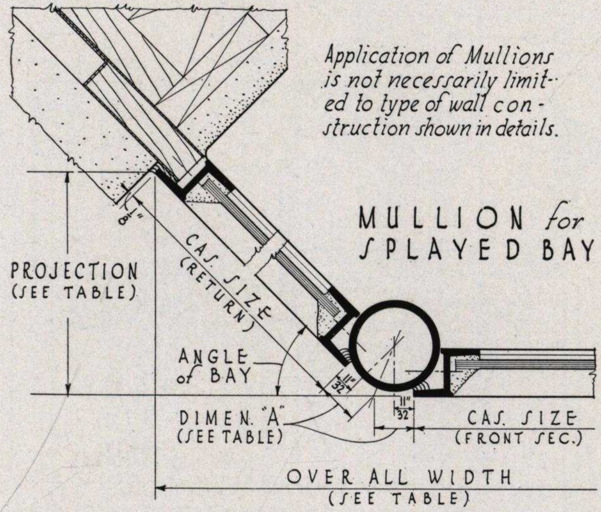
Standard pipe mullions for corner or bay windows are furnished as non-load-bearing members. Construction above the windows must be supported by cantilever construction or lally column.

Where load-bearing mullions are required structural members should be used. These are not furnished by the window manufacturer, although a detail is included here suggesting a practical method for attaching casements to a typical structural mullion.

Pipe mullions are 1½" standard pipe (1.9" outside diameter) with a 12-gauge steel plate welded to each end for anchoring.

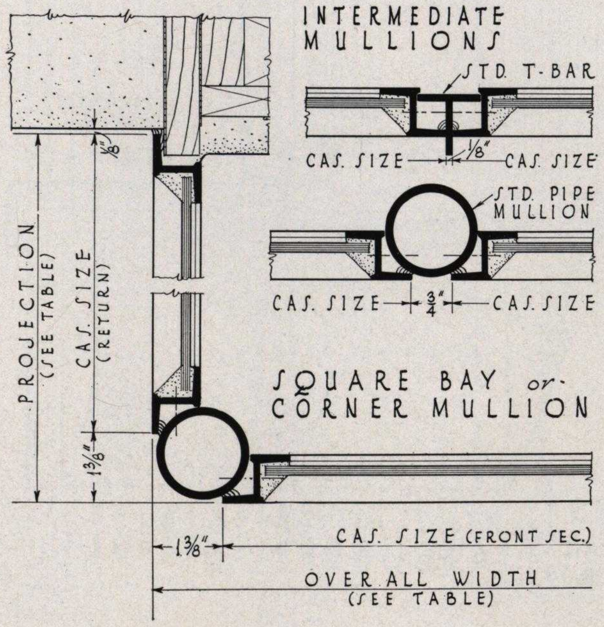


VERTICAL SEC. *showing* MULLION



Application of Mullions is not necessarily limited to type of wall construction shown in details.

MULLION *for* SPLAYED BAY



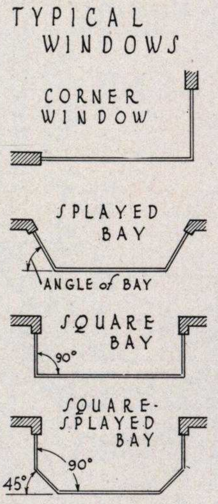


TABLE *of* DIMENSIONS **

ANGLE of BAY	DIMEN. A*	No. of LTS. in RETURN	OVER ALL WIDTHS				PROJECTION
			No. of LTS. in FRONT SEC.				
			3	4	6	8	
30°	5/8"	1	4'-8 1/8"	5'-2 5/8"	6'-8 3/4"	8'-2 7/8"	6 7/8"
		2	5'-6 1/2"	6'-1"	7'-7 1/8"	9'-1 1/4"	9 7/8"
45°	3/4"	1	4'-4 1/4"	4'-10 3/4"	6'-4 7/8"	7'-11"	9 7/8"
		2	5'-0 3/4"	5'-7 1/4"	7'-1 3/8"	8'-7 1/2"	1'-2 1/8"
60°	15/16"	1	3'-11"	4'-5 1/2"	5'-11 5/8"	7'-5 3/4"	1'-0 1/4"
		2	4'-5"	4'-11 1/2"	6'-5 5/8"	7'-11 3/4"	1'-5 3/8"
90°	1 3/8"	1 2	2'-9 3/4"	3'-4 1/4"	4'-10 3/8"	6'-4 1/2"	1'-2 1/2" 1'-8 1/2"
SQUARE SPLAYED		1	4'-5 3/8"	4'-11 7/8"	6'-6"	8'-0 1/8"	2'-0 3/8"
		2	5'-1 7/8"	5'-8 3/8"	7'-2 1/2"	8'-8 5/8"	2'-10 5/8"

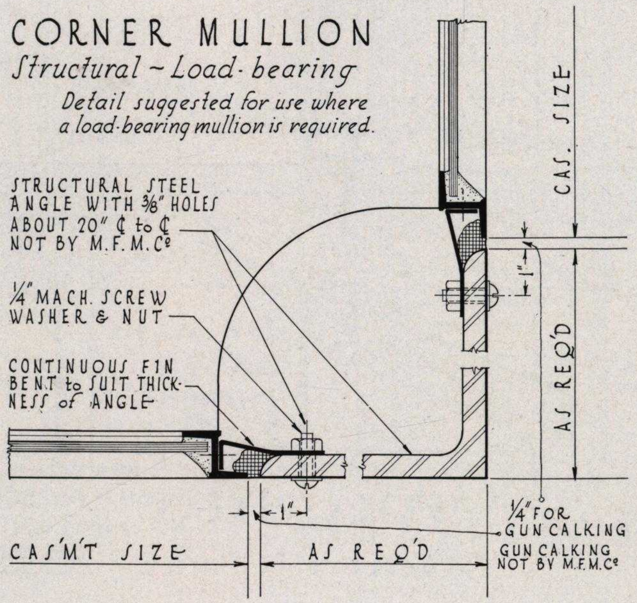
* *Dimension "A" is equal to approximately 11/32" + (Tan. ½ "ANGLE OF BAY") x 1*

** *Dimensions in table are based on use of a single unit in front section and in the returns. Where intermediate mullions are used this table will not apply.*

SCALE *for* DETAILS
3" = 1'-0"

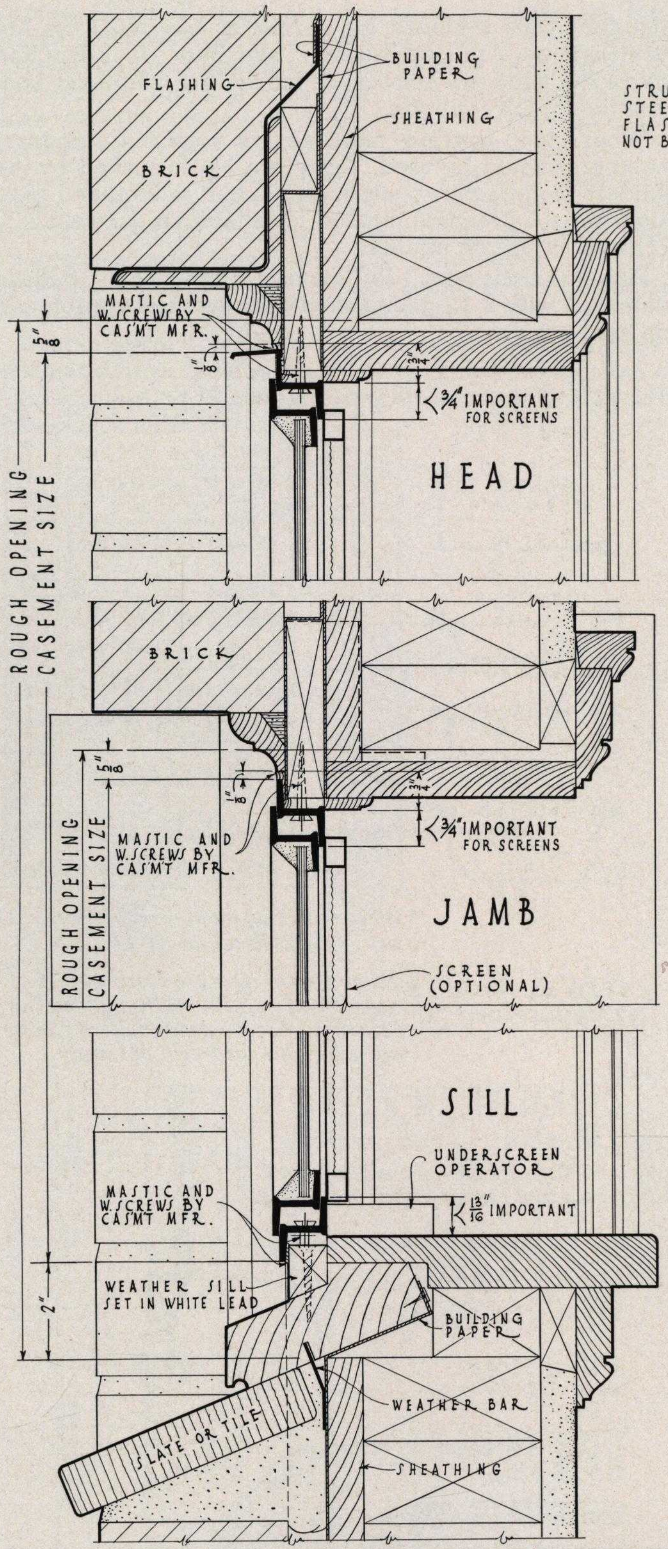
CORNER MULLION
Structural ~ Load-bearing

Detail suggested for use where a load-bearing mullion is required.


STRUCTURAL STEEL ANGLE WITH 3/8" HOLES ABOUT 20" ℄ to ℄ NOT BY M.F.M.Co.
1/4" MACH. SCREW WASHER & NUT
CONTINUOUS FIN BENT to SUIT THICKNESS of ANGLE
CAS. SIZE
1"
AS REQ'D
1"
CAS'M'T SIZE
AS REQ'D
1/4" FOR GUN CALKING
GUN CALKING NOT BY M.F.M.Co.

LUPTON RESIDENCE CASEMENTS *Opening Details*

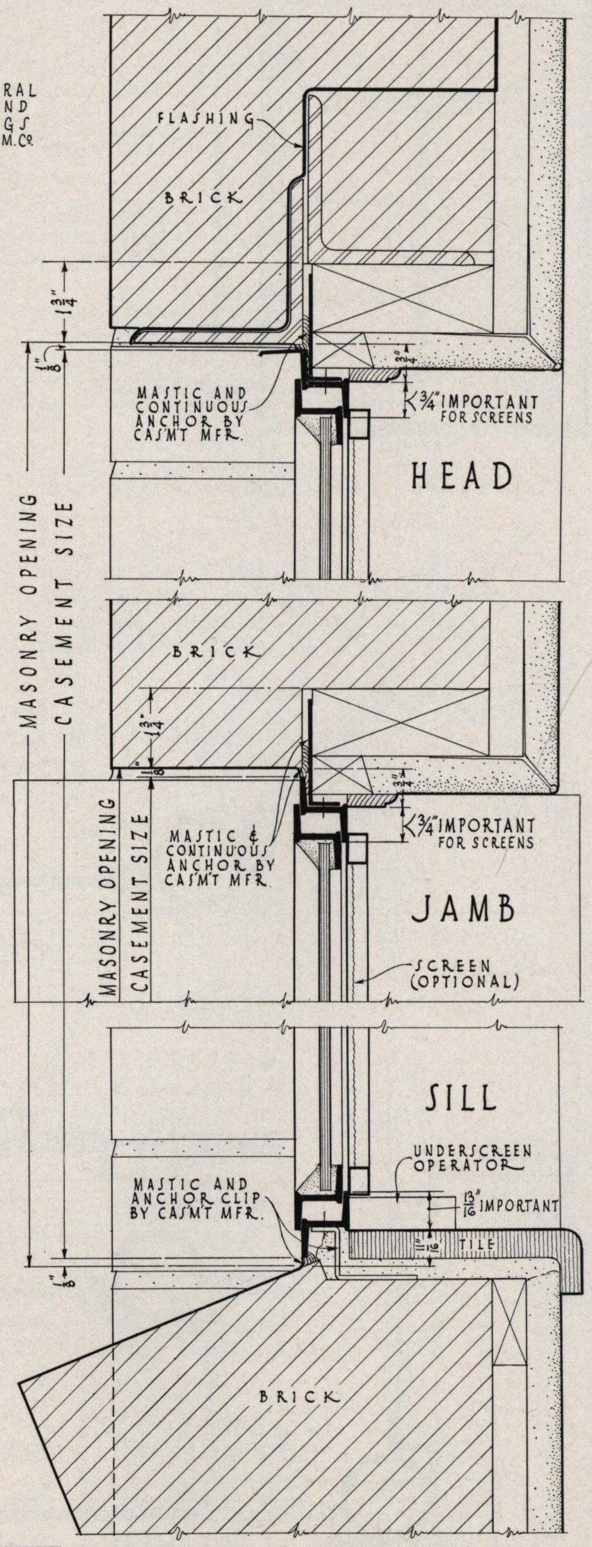
STRUCTURAL STEEL AND FLASHINGS NOT BY M.F.M.Co.


FLASHING
BUILDING PAPER
SHEATHING
BRICK
MASTIC AND W. SCREWS BY CASM'T MFR.
5/8"
1/8"
3/4"
3/4" IMPORTANT FOR SCREENS
HEAD
ROUGH OPENING CASEMENT SIZE
BRICK
5/8"
1/8"
3/4"
MASTIC AND W. SCREWS BY CASM'T MFR.
3/4" IMPORTANT FOR SCREENS
ROUGH OPENING CASEMENT SIZE
JAMB
SCREEN (OPTIONAL)
SILL
UNDERSCREEN OPERATOR
MASTIC AND W. SCREWS BY CASM'T MFR.
13/16" IMPORTANT
WEATHER SILL SET IN WHITE LEAD
2"
BUILDING PAPER
WEATHER BAR
SLATE OR TILE
SHEATHING

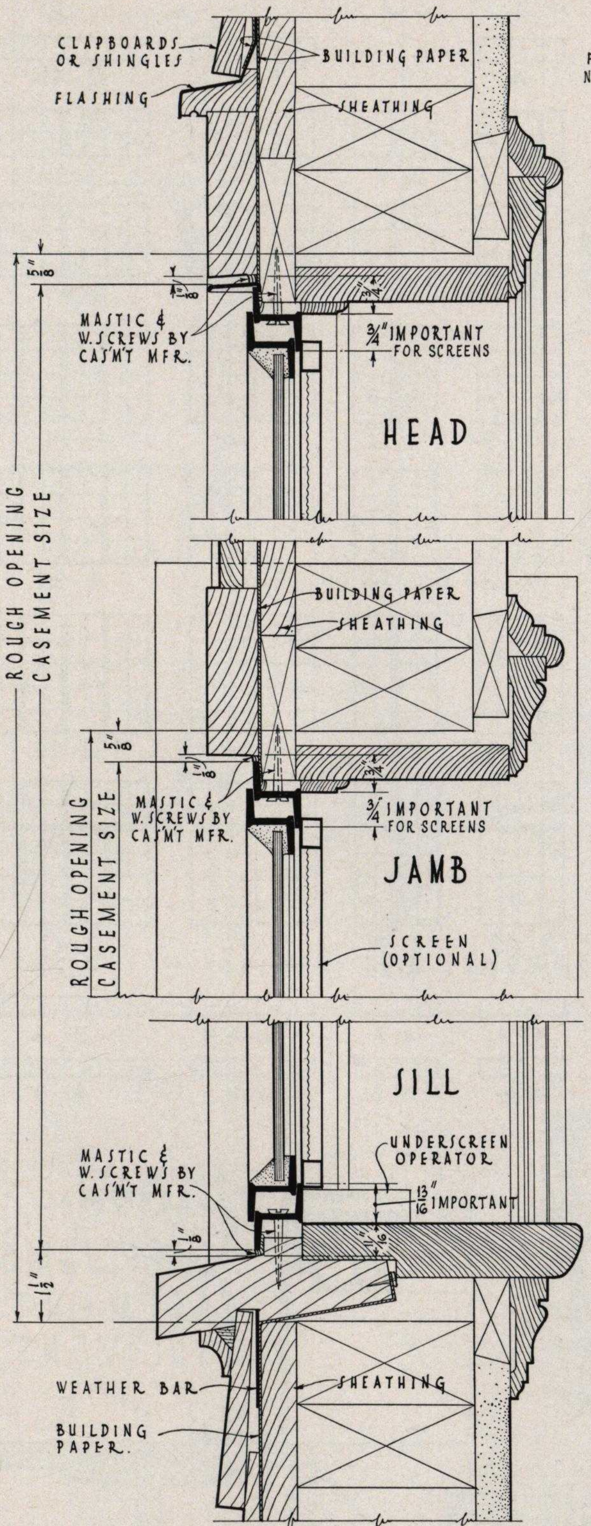
BRICK·VENEER

SCALE 3" = 1'-0"

For SCREEN DETAILS
See pages 14 & 15


FLASHING
BRICK
1 3/4"
1/8"
3/4"
MASTIC AND CONTINUOUS ANCHOR BY CASM'T MFR.
3/4" IMPORTANT FOR SCREENS
HEAD
MASONRY OPENING CASEMENT SIZE
BRICK
1 3/4"
1/8"
3/4"
MASTIC & CONTINUOUS ANCHOR BY CASM'T MFR.
3/4" IMPORTANT FOR SCREENS
MASONRY OPENING CASEMENT SIZE
JAMB
SCREEN (OPTIONAL)
SILL
UNDERSCREEN OPERATOR
MASTIC AND ANCHOR CLIP BY CASM'T MFR.
13/16" IMPORTANT
11/16"
TILE
1/8"
BRICK

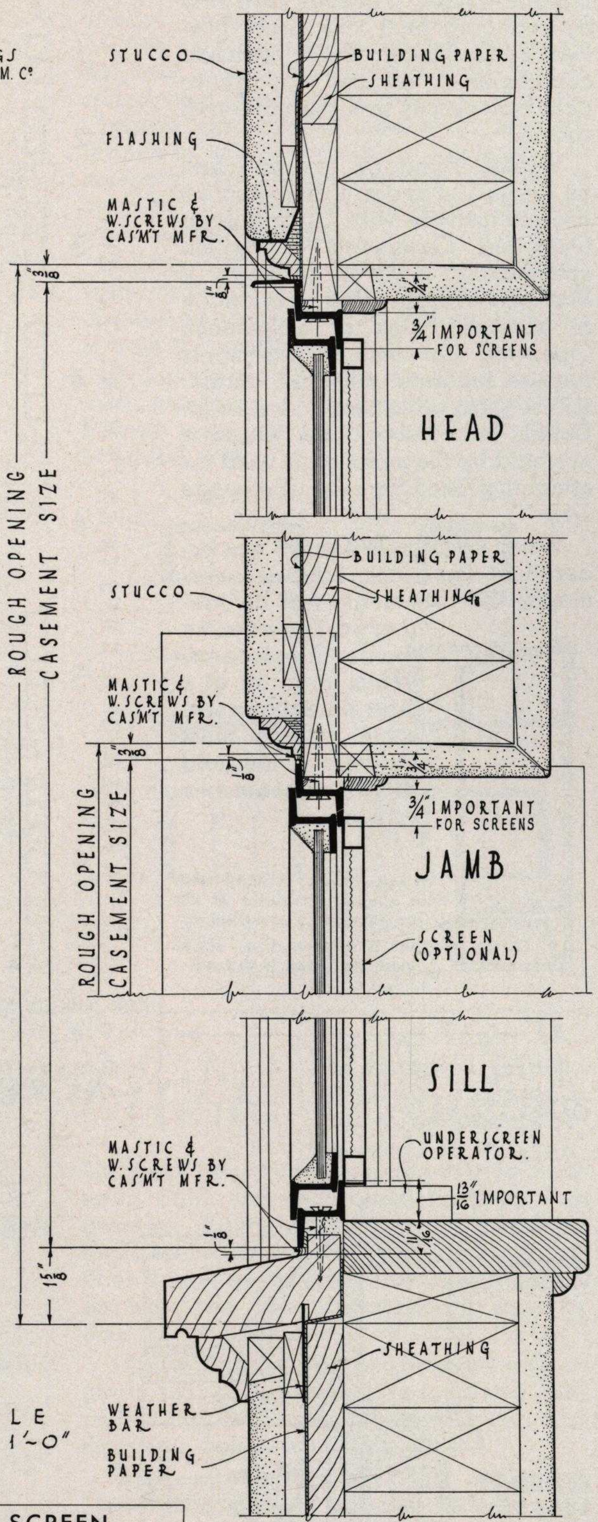
SOLID·BRICK·WITH CONTINUOUS·ANCHORS



FRAME·WITH·SHINGLES
·or·CLAPBOARDS·

SCALE
3" = 1'-0"

For SCREEN DETAILS
See pages 14 & 15



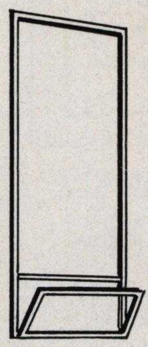
·FRAME·
AND·STUCCO

Winter Windows

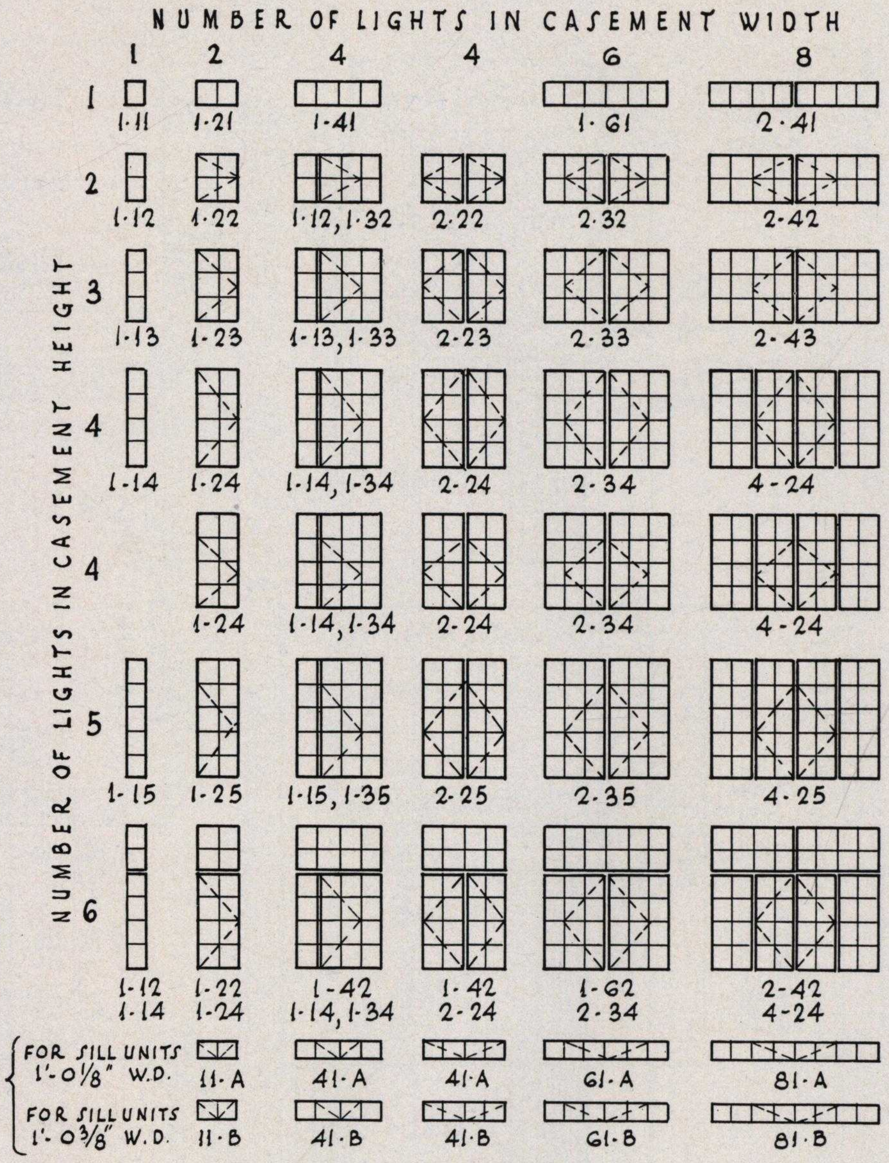
Lupton Winter Windows save fuel by reducing heat loss. They prevent condensation under ordinary conditions of use and are practically a necessity in air-conditioned rooms.

Winter Windows are attached on the inside and are designed for use exclusively with Underscreen Operated Casements. Complete specification is given on page 7. Sketches at right show application to various types of casements. Operated transoms in casements require separate units. Sill ventilators require units attached outside. Details below show how windows are held by the same clips used for attaching Fixed Screens. (See page 14.)

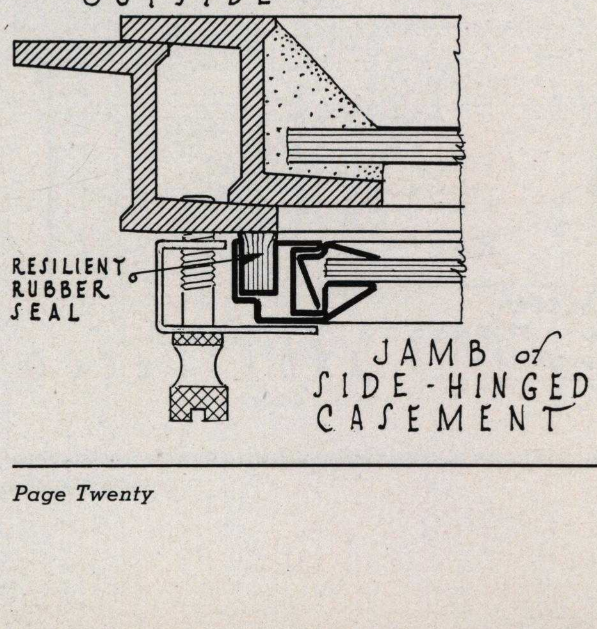
When Winter Windows are ordered at the same time as casements, the casements will be prepared to receive them at no extra cost. When ordered at a later time, however, some drilling must be done in the field at the customer's expense.

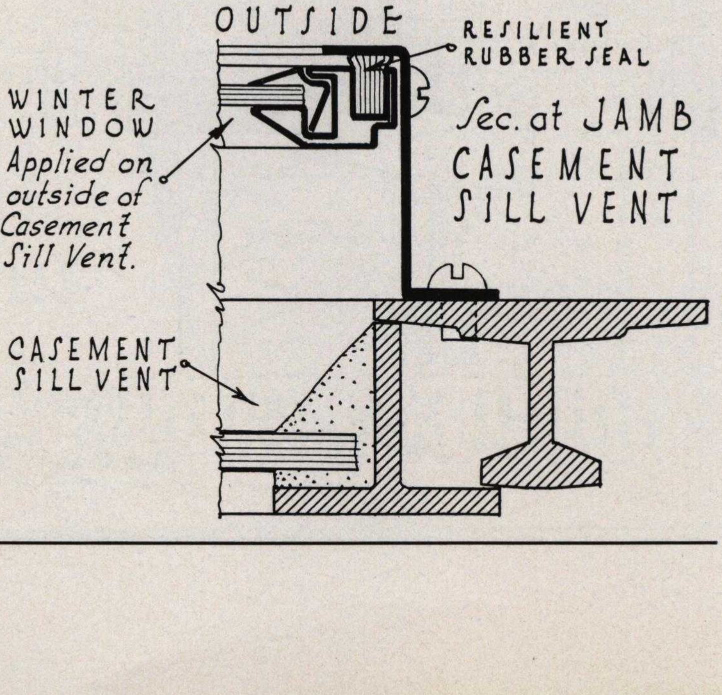


At left—Winter window with an open-in ventilator at sill for emergency ventilation. This is furnished at slight increase in cost if desired.



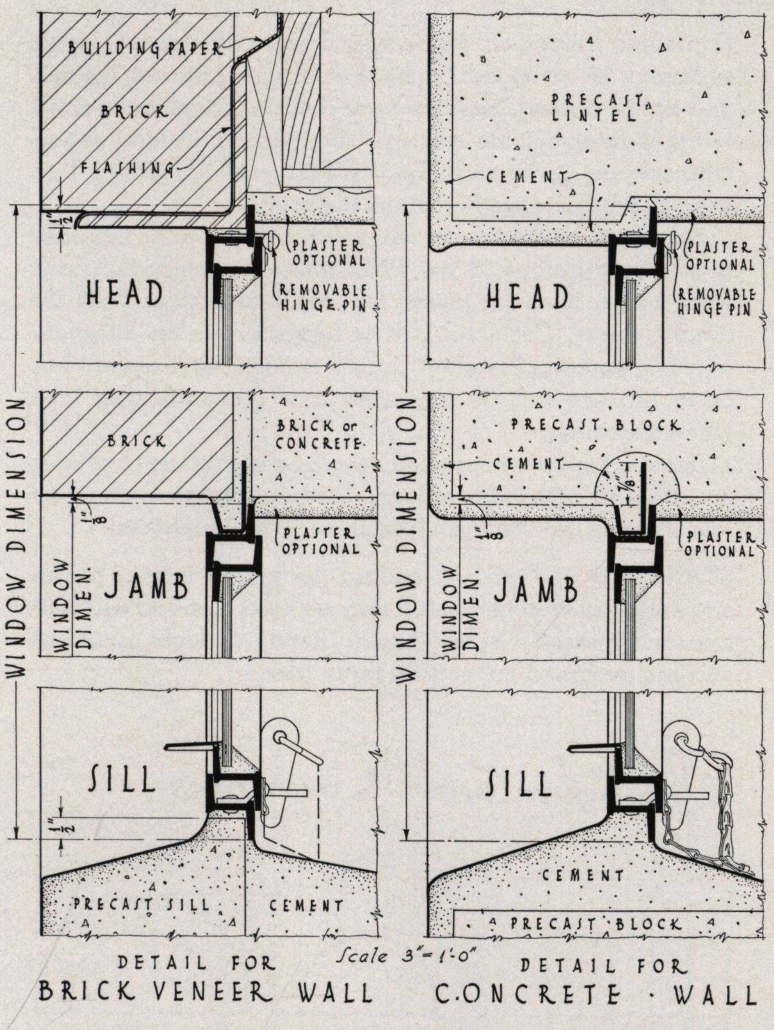
At right Winter Windows for Casement Sill Vents to be applied to the outside of Casement





OUTSIDE
RESILIENT RUBBER SEAL
WINTER WINDOW Applied on outside of Casement Sill Vent.
Sec. at JAMB CASEMENT SILL VENT
CASEMENT SILL VENT

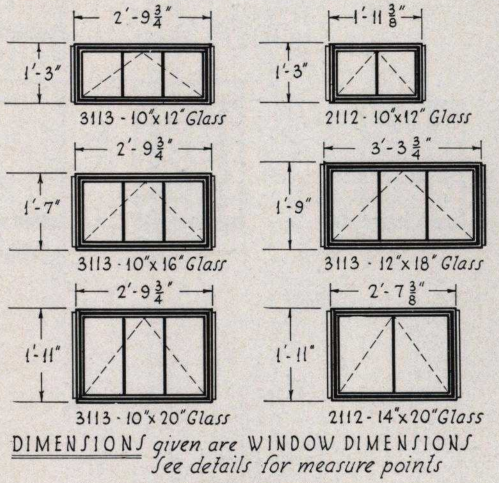
Basement Windows



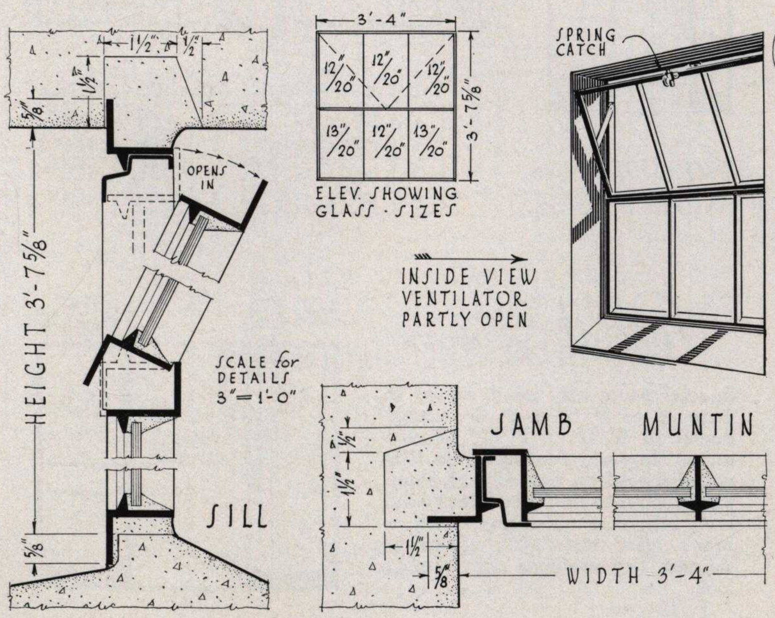
Lupton Basement Windows are complete window units ready for installation and are carried in stock by dealers for immediate delivery. They are sturdily built of hot-rolled steel Residence Casement Sections. Corners are mitered and solid welded. Jamb fins are furnished for anchoring in masonry. Ventilators are top hinged to open in at bottom and are easily removed from inside if necessary.

Frames and sash are shipped assembled with hardware attached. One priming coat of paint is applied at the factory. Glazing is from the inside with putty.

Holes are provided for attaching screens to the steel frames. Steel frame screens with bronze wire can be furnished if desired at added cost.



**Standard Types and Sizes
Lupton Basement Windows.**



Utility Windows

Utility Windows are designed to give maximum light and controlled ventilation in garages, filling stations, small buildings and basements; especially where basement floor is near grade level or where areaways are provided. They are carried in stock by dealers for openings 3′ 4″ x 3′ 7⅝″.

Utility Windows are constructed with an angle-shaped frame section to permit easy installation in various types of wall construction. See detail at left.

Windows have lower half stationary. Upper part opens in at top and is held automatically at any desired position to supply fresh air without draft or interference with space requirements. Spring catch locks window when closed. Glazing is from inside with putty.

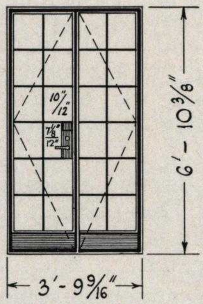
Casement Doors

Doors and frames are made with Lupton Master Casement sections 1 ¼″ deep front to back. Joints are mitered, welded and finished flush. Muntins have flush interlocking welded joints at intersections and are riveted and welded at end connections. Doors and frames are shipped assembled. Two coats of paint are applied at the factory.

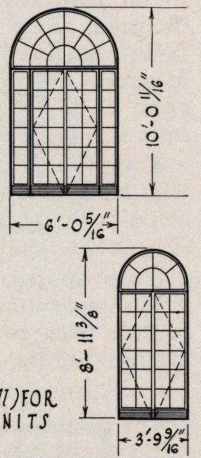
Standard hardware is all solid bronze and includes bronze butt hinges (3 per leaf), mortise push button lock with thumb latch on inside and top and bottom bolts for double doors. Cremone bolt is furnished as an alternate when specified. Standard finish is metallic lacquer, but other finishes will be furnished at a corresponding cost when specified.

Special hardware supplied at extra cost includes cylinder for either or both sides of lock, dummy handles on inactive leaf, bronze threshold and bronze friction adjusters.

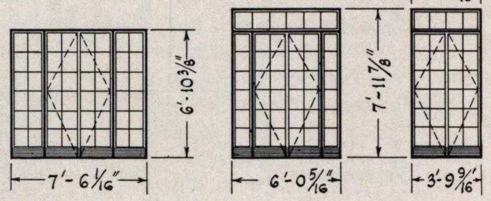
STANDARD DOORS:—Standard doors and frames of the size and type sketched at left may be used alone or with the transoms and side lights shown. Standard doors open out and are designed for outside putty glazing.



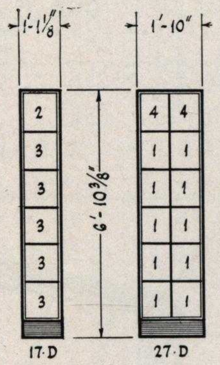
STANDARD DOOR
OUTSIDE ELEV.

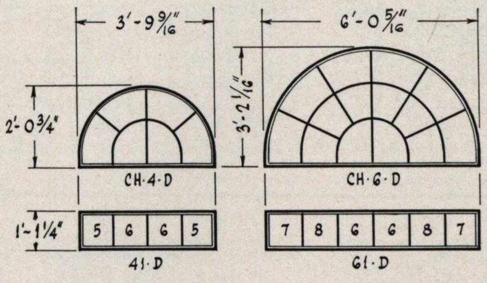


SIZES (over all) FOR COMBINED UNITS



Sidelights and Transoms

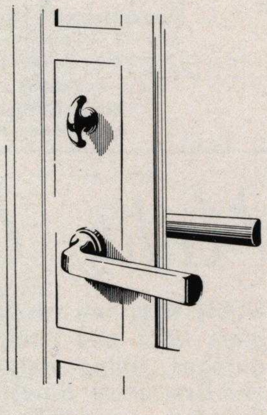




DIMENSIONS given are OVER ALL sizes.

Glass for Transoms and Side Lights—

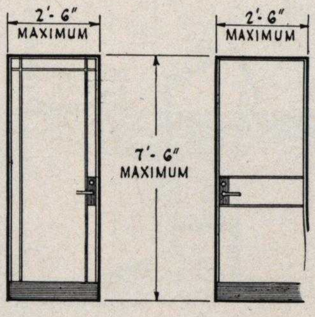
1	10″ x 12″	5	10⅞″ x 11½″
2	11⅜″ x 12⅞″	6	10½″ x 11½″
3	11⅜″ x 12″	7	12½″ x 11½″
4	10″ x 12⅞″	8	11⅜″ x 11½″

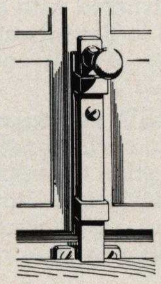


Solid bronze mortise lock with thumb latch and push buttons. Standard for all casement doors. Also available with one or two cylinders.

Special Doors

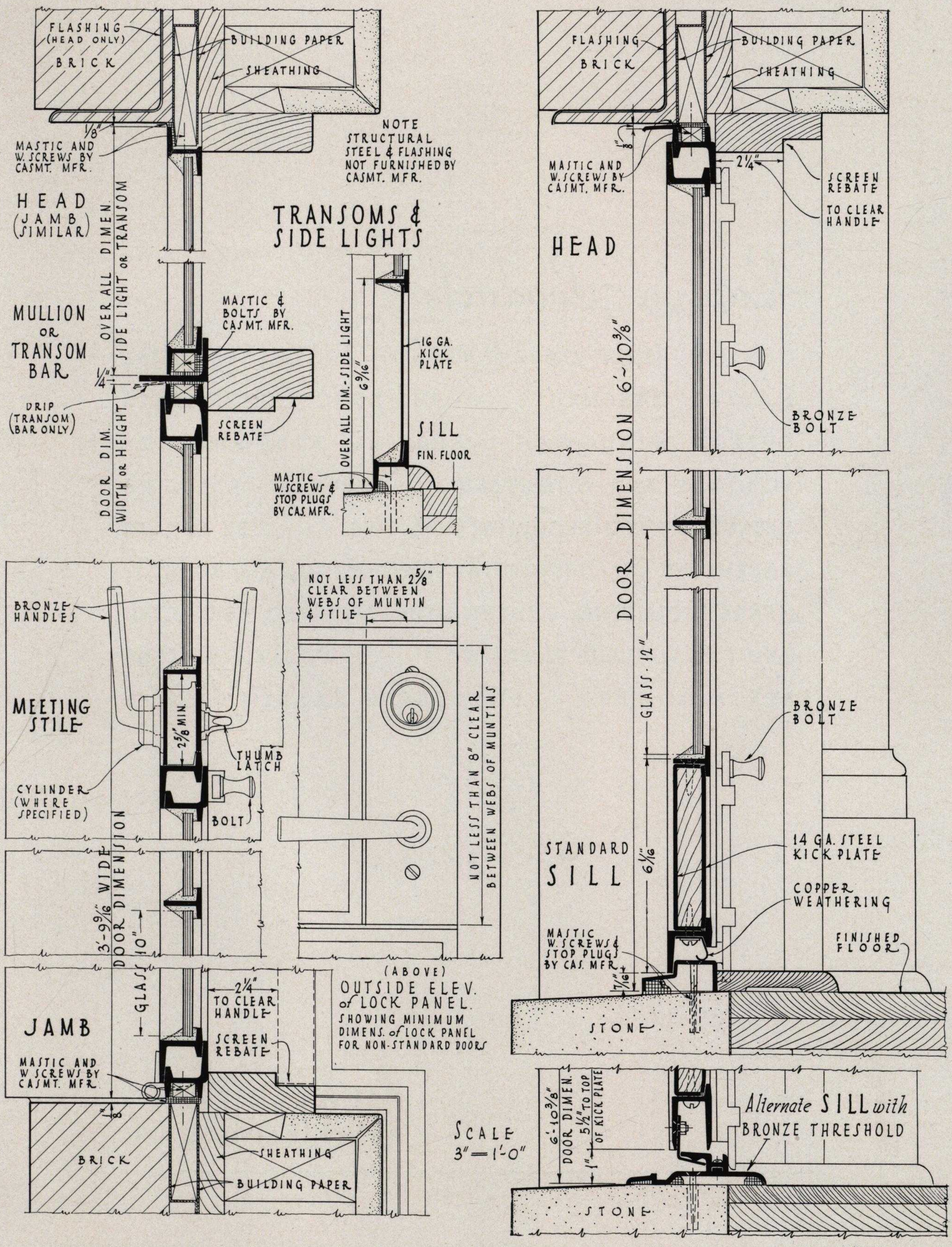
Special doors may be designed in sizes up to 2′ 6″ x 7′ 0″ (single doors) or 5′ 0″ x 7′ 0″ (double doors). In designing doors the lock panel should be framed with muntins to avoid cutting glass around the lock, otherwise glass may crack or break after installation. Sketches suggest two methods for framing lock.





Solid bronze bottom bolt. Top bolt is similar.

Casement Doors


FLASHING (HEAD ONLY)
BRICK
BUILDING PAPER
SHEATHING
1/8"
MASTIC AND W. SCREWS BY CASMT. MFR.
HEAD (JAMB SIMILAR)
NOTE STRUCTURAL STEEL & FLASHING NOT FURNISHED BY CASMT. MFR.
OVER ALL DIMEN SIDE LIGHT or TRANSOM
MULLION or TRANSOM BAR
MASTIC & BOLTS BY CASMT. MFR.
1/4"
DRIP (TRANSOM BAR ONLY)
SCREEN REBATE
DOOR DIM. WIDTH or HEIGHT
TRANSOMS & SIDE LIGHTS
OVER ALL DIM.-SIDE LIGHT
6 9/16"
16 GA. KICK PLATE
SILL
FIN. FLOOR
MASTIC W. SCREWS & STOP PLUGS BY CAS. MFR.
BRONZE HANDLES
MEETING STILE
2 5/8" MIN.
THUMB LATCH
CYLINDER (WHERE SPECIFIED)
BOLT
3'-9 9/16" WIDE DOOR DIMENSION
GLASS 10"
NOT LESS THAN 2 5/8" CLEAR BETWEEN WEBS OF MUNTIN & STILE
NOT LESS THAN 8" CLEAR BETWEEN WEBS OF MUNTINS
(ABOVE) OUTSIDE ELEV. of LOCK PANEL. SHOWING MINIMUM DIMENS. of LOCK PANEL FOR NON-STANDARD DOORS
JAMB
2 1/4" TO CLEAR HANDLE
SCREEN REBATE
MASTIC AND W SCREWS BY CASMT. MFR.
1/8"
BRICK
SHEATHING
BUILDING PAPER
SCALE 3" = 1'-0"
FLASHING
BRICK
BUILDING PAPER
SHEATHING
1/8"
MASTIC AND W. SCREWS BY CASMT. MFR.
2 1/4"
SCREEN REBATE
TO CLEAR HANDLE
HEAD
DOOR DIMENSION 6'-10 3/8"
BRONZE BOLT
GLASS 12"
BRONZE BOLT
STANDARD SILL
6 1/16"
14 GA. STEEL KICK PLATE
COPPER WEATHERING
MASTIC W. SCREWS & STOP PLUGS BY CAS. MFR.
7/16"
FINISHED FLOOR
STONE
6'-10 3/8" DOOR DIMEN.
5 1/2" TO TOP OF KICK PLATE
1"
Alternate SILL with BRONZE THRESHOLD
STONE

Lupton Products

CUSTOM BUILT CASEMENTS . . . CASEMENT DOORS MASTER CASEMENTS . . . RESIDENCE CASEMENTS OFFICE WINDOWS . . . SPECIAL WINDOWS FOR SCHOOLS AND HOSPITALS . . . BASEMENT WINDOWS DETENTION AND SECURITY WINDOWS . . . FIRE ESCAPE CASEMENTS . . . INDUSTRIAL WINDOWS FOR ALL REQUIREMENTS INCLUDING UNDERWRITERS', PIVOTED, PROJECTED AND CONTINUOUS WINDOWS . . . OPERATING DEVICES STEEL DOORS . . . PUTTYLESS SKYLIGHTS . . .

MICHAEL FLYNN
MANUFACTURING CO.

A.I.A. File 16-E-1

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